

L Number	Hits	Search Text	DB	Time stamp
1	547	mecamylamine or mecamine	USPAT; US-PGPUB	2003/08/26 14:13
2	682	bupropion	USPAT; US-PGPUB	2003/08/26 14:13
3	213	dextrorphan	USPAT; US-PGPUB	2003/08/26 14:14
4	2	18-methoxycoronaridine	USPAT; US-PGPUB	2003/08/26 14:14
5	1470	dextromethorphan or d-methorphan	USPAT; US-PGPUB	2003/08/26 14:14
11	165	dextrorphan and (dextromethorphan or d-methorphan)	USPAT; US-PGPUB	2003/08/26 14:15
6	53	(mecamylamine or mecamine) and bupropion	USPAT; US-PGPUB	2003/08/26 14:15
7	20	(mecamylamine or mecamine) and dextrorphan	USPAT; US-PGPUB	2003/08/26 14:19
8	51	(mecamylamine or mecamine) and (dextromethorphan or d-methorphan)	USPAT; US-PGPUB	2003/08/26 14:21
9	28	bupropion and dextrorphan	USPAT; US-PGPUB	2003/08/26 14:22
10	70	bupropion and (dextromethorphan or d-methorphan)	USPAT; US-PGPUB	2003/08/26 14:23
-	1472	dextromethorphan or d-methorphan or (3-methoxy-17-methylmorphinan) or (3-methoxy-n-methylmorphinan) or tusilan or tussade or metrorat or methorate or morphine or demorphan or delsym or tussade	USPAT; US-PGPUB	2003/08/26 10:23
-	10	18-methoxycoronaridine or 18mc	USPAT; US-PGPUB	2003/08/26 10:24
-	35	(18-methoxycoronaridine or 18mc) or iboga or (iboga adj alkaloid)	USPAT; US-PGPUB	2003/08/26 10:25
-	1	(dextromethorphan or d-methorphan or (3-methoxy-17-methylmorphinan) or (3-methoxy-n-methylmorphinan) or tusilan or tussade or metrorat or methorate or morphine or demorphan or delsym or tussade) and (18-methoxycoronaridine or 18mc)	USPAT; US-PGPUB	2003/08/26 10:25
-	4	(dextromethorphan or d-methorphan or (3-methoxy-17-methylmorphinan) or (3-methoxy-n-methylmorphinan) or tusilan or tussade or metrorat or methorate or morphine or demorphan or delsym or tussade) and ((18-methoxycoronaridine or 18mc) or iboga or (iboga adj alkaloid))	USPAT; US-PGPUB	2003/08/26 10:42
-	1	"5616707" .pn.	USPAT; US-PGPUB	2003/08/26 10:43
-	10783	nicotinic	USPAT; US-PGPUB	2003/08/26 10:44
-	4903	(nicotinic) and (alpha and beta)	USPAT; US-PGPUB	2003/08/26 10:45
-	3806	((nicotinic) and (alpha and beta)) and combination	USPAT; US-PGPUB	2003/08/26 10:45
-	195	(((nicotinic) and (alpha and beta)) and combination) and addiction	USPAT; US-PGPUB	2003/08/26 10:52
-	1	(((18-methoxycoronaridine or 18mc) or iboga or (iboga adj alkaloid)) and (((nicotinic) and (alpha and beta)) and combination) and addiction)	USPAT; US-PGPUB	2003/08/26 10:52
-	5	((((nicotinic) and (alpha and beta)) and combination) and addiction) and (dextromethorphan or d-methorphan or (3-methoxy-17-methylmorphinan) or (3-methoxy-n-methylmorphinan) or tusilan or tussade or metrorat or methorate or morphine or demorphan or delsym or tussade)	USPAT; US-PGPUB	2003/08/26 10:52

(FILE 'HOME' ENTERED AT 13:26:35 ON 26 AUG 2003)

FILE 'STNGUIDE' ENTERED AT 13:26:48 ON 26 AUG 2003

FILE 'HOME' ENTERED AT 13:26:59 ON 26 AUG 2003

FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, JAPIO, USPATFULL' ENTERED AT 13:27:59 ON 26 AUG 2003

L1 9377 S MECAMYLAMINE OR 60-40-2/RN OR MECAMINE
L2 133 S 18-METHOXYCORONARIDINE OR 308123-60-6/RN
L3 9018 S DEXTROMETHORPHAN OR 125-71-3/RN OR D-METHORPHAN
L4 4511 S BUPROPION OR 349-55-2/RN
L5 3771 S DEXTORPHAN OR 125-73-5/RN
L6 15 S L1 AND L2
L7 80 S L1 AND L3
L8 109 S L1 AND L4
L9 27 S L1 AND L5
L10 15 S L2 AND L3
L11 11 S L2 AND L4
L12 3 S L2 AND L5
L13 106 S L3 AND L4
L14 1584 S L3 AND L5
L15 29 S L4 AND L5
L16 6 DUP REM L6 (9 DUPLICATES REMOVED)
L17 65 DUP REM L7 (15 DUPLICATES REMOVED)
L18 85 DUP REM L8 (24 DUPLICATES REMOVED)
L19 21 DUP REM L9 (6 DUPLICATES REMOVED)
L20 6 DUP REM L10 (9 DUPLICATES REMOVED)
L21 5 DUP REM L11 (6 DUPLICATES REMOVED)
L22 2 DUP REM L12 (1 DUPLICATE REMOVED)
L23 89 DUP REM L13 (17 DUPLICATES REMOVED)
L24 28 DUP REM L15 (1 DUPLICATE REMOVED)
L25 65 FOCUS L17 1-
L26 85 FOCUS L18 1-
L27 89 FOCUS L23 1-
L28 55 S L14 AND ADDICTION
L29 55 FOCUS L28 1-

=>

(FILE 'HOME' ENTERED AT 09:50:43 ON 26 AUG 2003)

FILE 'REGISTRY' ENTERED AT 09:51:55 ON 26 AUG 2003

L1 4 S 18-METHOXYCORONARIDINE
L2 31 S DEXTROMETHORPHAN

FILE 'CAPLUS, MEDLINE, JAPIO' ENTERED AT 09:54:38 ON 26 AUG 2003

FILE 'CAPLUS, MEDLINE, JAPIO, USPATFULL' ENTERED AT 09:54:46 ON 26 AUG 2003

L3 62 S 18-METHOXYCORONARIDINE OR 308123-60-6/RN OR 266686-77-5/RN OR
L4 0 S BIOSIS EMBASE CAPLUS WPIO USPATJAPIO MEDLINE

FILE 'BIOSIS, EMBASE, CAPLUS, USPATFULL, JAPIO, MEDLINE' ENTERED AT 09:56:54 ON 26 AUG 2003

L5 133 S L3
L6 8967 S DEXTROMETHORPHAN OR D-METHORPHAN OR NODEX OR BA 2666 OR 3-MET
L7 1998 S 125-71-3/RN OR 125-69-9/RN OR 3-METHOXY-N-METHYLMORPHINAN OR
L8 0 S L6 AND LL7
L9 9226 S L6 OR L7
L10 15 S L3 AND L9
L11 6 DUP REM L10 (9 DUPLICATES REMOVED)
L12 2390383 S ADDICTION OR NICOTINE OR COCAINE OR ALCOHOL OR ETHANOL OR IN
L13 9 S L12 AND ADDICTION
L14 23029 S L12 AND ADDICTION
L15 43 S L14 AND L3
L16 22 DUP REM L15 (21 DUPLICATES REMOVED)
L17 22 FOCUS L16 1-22
L18 154 S L14 AND L6
L19 146 DUP REM L18 (8 DUPLICATES REMOVED)
L20 146 FOCUS L19 1-

=>

L20 ANSWER 34 OF 146 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:373737 CAPLUS

DOCUMENT NUMBER: 133:99376

TITLE: **Dextromethorphan** and its metabolite
dextrorphan block $\alpha.3.\beta.4$ neuronal nicotinic
receptors

AUTHOR(S): Hernandez, Susan C.; Bertolino, Maria; Xiao, Yingxian;
Pringle, Kenneth E.; Caruso, Frank S.; Kellar, Kenneth
J.

CORPORATE SOURCE: Department of Pharmacology, Georgetown University
School of Medicine, Washington, DC, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics
(2000), 293(3), 962-967

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental
Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Dextromethorphan** (DM), a structural analog of morphine and
codeine, has been widely used as a cough suppressant for more than 40 yr.
DM is not itself a potent analgesic, but it has been reported to enhance
analgesia produced by morphine and nonsteroidal anti-inflammatory drugs.
Although DM is considered to be nonaddictive, it has been reported to
reduce morphine tolerance in rats and to be useful in helping addicted
subjects to withdraw from heroin. Here we studied the effects of DM on
neuronal nicotinic receptors stably expressed in human embryonic kidney
cells. Studies were carried out to examine the effects of DM on
nicotine-stimulated whole cell currents and **nicotine**
-stimulated 86Rb^+ efflux. We found that both DM and its metabolite
dextrorphan block nicotinic receptor function in a noncompetitive but
reversible manner, suggesting that both drugs block the receptor channel.
Consistent with blockade of the receptor channel, neither drug competed
for the nicotinic agonist binding sites labeled by $[3\text{H}]\text{epibatidine}$.
Although DM is approx. 9-fold less potent than the widely used
noncompetitive nicotinic antagonist mecamylamine in blocking nicotinic
receptor function, the block by DM appears to reverse more slowly than
that by mecamylamine. These data indicate that DM is a useful antagonist
for studying nicotinic receptor function and suggest that it might prove
to be a clin. useful neuronal nicotinic receptor antagonist, possibly
helpful as an aid for helping people addicted to **nicotine** to
refrain from smoking, as well as in other conditions where blockade of
neuronal nicotinic receptors would be helpful.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 146 USPATFULL on STN

ACCESSION NUMBER: 1998:82361 USPATFULL

TITLE: Methods and articles of manufacture for
nicotine cessation and monitoring
nicotine use

INVENTOR(S): Eswara, Amruta R., Beverly, MA, United States
Muni, Neal, N. Reading, MA, United States
Schneider, F. Howard, Yarmouth, MA, United States
Mione, Peter J., Abington, MA, United States

PATENT ASSIGNEE(S): DynaGen, Inc., Cambridge, MA, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5780051		19980714
APPLICATION INFO.:	US 1997-779281		19970122 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-487853, filed on 7 Jun 1995, now abandoned And Ser. No. US 1992-881740, filed on 7 May 1992 which is a division of Ser. No. US 1993-135847, filed on 13 Oct 1993, now patented, Pat. No. US 5403595 which is a division of Ser. No. US 1995-415859, filed on 3 Apr 1995, now patented, Pat. No. US 5536503 which is a division of Ser. No. US 1993-145203, filed on 28 Oct 1993, now patented, Pat. No. US 5414005 which is a division of Ser. No. US 1992-862051, filed on 2 Apr 1992, now abandoned which is a division of Ser. No. US 1993-137687, filed on 15 Oct 1993, now abandoned which is a division of Ser. No. US 1994-279619, filed on 25 Jul 1994		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Azpuru, Carlos		
LEGAL REPRESENTATIVE:	Wolf, Greenfield & Sacks, P.C.		
NUMBER OF CLAIMS:	28		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 4 Drawing Page(s)		
LINE COUNT:	1863		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention features methods and articles of manufacture for
treating **nicotine** withdrawal symptoms and promoting smoking
cessation. The methods and articles feature the administration of an
effective amount of a **nicotine** substitute and monitor the
presence of **nicotine** in the biological sample of such subject
with a **nicotine** detection system.

L20 ANSWER 70 OF 146 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2000:211397 BIOSIS

DOCUMENT NUMBER: PREV200000211397

TITLE: In search of a new pharmacological treatment for drug and **alcohol addiction**: N-methyl-D-aspartate (NMDA) antagonists.

AUTHOR(S): Bisaga, Adam (1); Popik, Piotr

CORPORATE SOURCE: (1) Department of Psychiatry, College of Physicians and Surgeons, Columbia University, 722 West 168th Street, New York, NY, 10032 USA

SOURCE: Drug and Alcohol Dependence, (April 1, 2000) Vol. 59, No. 1, pp. 1-15.

ISSN: 0376-8716.

DOCUMENT TYPE: General Review

LANGUAGE: English

SUMMARY LANGUAGE: English

AB The most challenging aspect of treating **alcohol** and drug **addiction** is the relapsing course of these disorders. Although substitution therapies for **nicotine** and opiod dependence have proven to be relatively effective, there is a need for new pharmacotherapies designed to decrease the frequency and severity of relapse. The aim of this paper is to provide an overview of the potential utility of N-methyl-D-aspartate (NMDA) receptor antagonists as treatments for substance abuse as shown in preclinical models and preliminary clinical trials. It is hypothesized that NMDA receptors mediate the common adaptive processes that are involved the development, maintenance, and expression of drug and **alcohol addiction**. Modulation of glutamatergic neurotransmission with NMDA receptor antagonists offers a novel treatment approach. It is proposed that NMDA antagonists may have multiple functions in treating **addictions**, including an attenuation of withdrawal effects, normalization of the affective changes following initiation of abstinence which arise from neurochemical changes resulting from chronic **addiction**, and an attenuation of conditioned responses arising from drug-related stimuli.

L20 ANSWER 62 OF 146 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1969:494831 CAPLUS

DOCUMENT NUMBER: 71:94831

TITLE: Concurrent separation of some drugs of
addiction in submicrogram quantities by thin
layer chromatography

AUTHOR(S): Harrison, Anthony J.; Cook, A.

CORPORATE SOURCE: Public Anal. Dep., Portsmouth, UK

SOURCE: Journal of the Association of Public Analysts (1969),
7(2), 47-9

CODEN: JPANA7; ISSN: 0004-5780

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A thin layer chromatog. system for the sepn. and identification of 6 drugs
is given with details of the 3 development reagents. The system seps.
diphanone, cyclizine-HCl, **cocaine**, heroin,
dextromethorphan and morphine, in admixt. In a mixed spot
consisting of any combination of the 6 drugs it is possible to sep. and
detect them with certainty with only 0.3 .mu.g. of the drug present.
Subsequent work with the solvent system described has shown it to have
potential use with basic drugs.

ACCESSION NUMBER: 2003314923 EMBASE

TITLE: Anti-addictive actions of an iboga alkaloid congener: A novel mechanism for a novel treatment.

AUTHOR: Maisonneuve I.M.; Glick S.D.

CORPORATE SOURCE: I.M. Maisonneuve, Ctr. for Neuropharmacology/Neurosci., Albany Medical College, MC-136, 47 New Scotland Avenue, Albany, NY 12208, United States. maisoni@mail.amc.edu

SOURCE: Pharmacology Biochemistry and Behavior, (2003) 75/3 (607-618).

Refs: 109

ISSN: 0091-3057 CODEN: PBBHAU

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 008 Neurology and Neurosurgery

030 Pharmacology

037 Drug Literature Index

040 Drug Dependence, Alcohol Abuse and Alcoholism

LANGUAGE: English

SUMMARY LANGUAGE: English

AB 18-Methoxycoronaridine (18-MC), a novel iboga alkaloid congener that decreases drug self-administration in several animal models, may be a potential treatment for multiple forms of drug abuse. In animal models, 18-MC reduced intravenous morphine, **cocaine**, methamphetamine and **nicotine** self-administration, oral **alcohol** and **nicotine** intake, and attenuated signs of **opioid** withdrawal, but had no effect on responding for a nondrug reinforcer (water) and produced no apparent toxicity [Brain Res. 719 (1996) 29; NeuroReport 11 (2000) 2013; Pharmacol. Biochem. Behav. 58 (1997) 615; Psychopharmacology (Berl.) 139 (1998) 274; NeuroReport 9 (1998) 1283; Ann. N. Y. Acad. Sci. 914 (2000) 369]. Consistent with a relationship among drug sensitization, mesolimbic dopamine, and drug-seeking behavior, 18-MC also blocked the sensitized dopamine responses to morphine and **cocaine** in the nucleus accumbens. An extensive series of receptor studies showed that 18-MC was most potent and somewhat selective as an antagonist at .alpha.3.beta.4 nicotinic receptors. Low-dose combinations of 18-MC with other drugs known to have this same action (e.g., mecamylamine, **dextromethorphan**, bupropion) decreased morphine, methamphetamine, and **nicotine** self-administration in rats at doses that were ineffective if administered alone. Together, the data support the hypothesis that diencephalic pathways having high densities of .alpha.3.beta.4 nicotinic receptors modulate mesocorticolimbic pathways more directly involved in drug reinforcement. Antagonists of .alpha.3.beta.4 nicotinic receptors may represent a totally novel approach to treating multiple addictive disorders, and 18-MC might be the first of a new class of synthetic agents acting via this novel mechanism and having a broad spectrum of activity. .COPYRGT. 2003 Elsevier Science Inc. All rights reserved.

L20 ANSWER 57 OF 146 USPATFULL on STN
ACCESSION NUMBER: 1999:78710 USPATFULL
TITLE: Rapid narcotic detoxification
INVENTOR(S): Simon, David Lew, Mansfield Center, CT, United States
PATENT ASSIGNEE(S): Intensive Narcotic Detoxification Centers of America,
LLC, Tolland, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5922705		19990713
APPLICATION INFO.:	US 1998-59031		19980413 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1996-631081, filed on 12 Apr 1996, now patented, Pat. No. US 5783583		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jordan, Kimberly		
LEGAL REPRESENTATIVE:	Cummings & Lockwood		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
LINE COUNT:	665		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for rapid detoxification of patients addicted to **opioid** narcotics are provided. The methods include administering nalmefene to induce acute withdrawal, and administering **dextromethorphan** with nalmefene or other **opioid** antagonists to reduce the patient's subjective feelings of residual withdrawal symptoms following detoxification. In one method of rapid detoxification, unconsciousness is induced by anesthetizing the patient with desflurane.

L11 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
 ACCESSION NUMBER: 2001:563554 BIOSIS
 DOCUMENT NUMBER: PREV200100563554
 TITLE: **Dextromethorphan** (DM) and **18-methoxycoronaridine** (18MC): Synergistic effects on morphine self-administration and possible mediation by nicotinic receptors.

AUTHOR(S): Maisonneuve, I. M. (1); Steinmiller, C. L. (1); Kitchen, B. A. (1); Glick, S. D. (1)

CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience, Albany Medical College, Albany, NY USA

SOURCE: Society for Neuroscience Abstracts, (2001) Vol. 27, No. 2, pp. 1776. print.
 Meeting Info.: 31st Annual Meeting of the Society for Neuroscience San Diego, California, USA November 10-15, 2001
 ISSN: 0190-5295.

DOCUMENT TYPE: Conference

LANGUAGE: English

SUMMARY LANGUAGE: English

AB DM, the active ingredient in most over-the-counter cough medicines, and 18MC, a novel iboga alkaloid congener, have both been found to decrease i.v. morphine self-administration in rats. The present study shows that a combination of 18MC and DM, at doses that are lower than those effective alone, also decreases morphine self-administration. Although DM, and its active metabolite dextrorphan (DO), are known to block NMDA glutamate receptors, comparable potencies of DM and DO on morphine self-administration suggest that glutamate antagonism is not the major mechanism involved in this instance. Furthermore, we have found that, unlike other NMDA antagonists, a behaviorally active dose of DM does not increase extracellular levels of dopamine in the shell of the nucleus accumbens. Similar to the combination of DM and 18MC, synergistic effects on morphine self-administration were also observed with combinations of DM and mecamylamine, of 18MC and mecamylamine, and of DM and bupropion. DM, 18MC, mecamylamine and bupropion have all been shown to block alpha3 beta4 nicotinic receptors. Considered together, all of these results suggest that antagonism of alpha3 beta4 nicotinic receptors may represent a novel strategy to reduce opioid intake; the use of combinations of low doses of unrelated drugs that act at this site may be a practical way of enhancing therapeutic efficacy while reducing side effects.

DUPLICATE 4

ACCESSION NUMBER: 2002:269869 BIOSIS
 DOCUMENT NUMBER: PREV200200269869
 TITLE: Antagonism of alpha3beta4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration.
 AUTHOR(S): Glick, Stanley D. (1); Maisonneuve, Isabelle M.; Kitchen, Barbara A.; Fleck, Mark W.
 CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience, Albany Medical College, 47 New Scotland Avenue, Albany, NY, 12208: glicks@mail.amc.edu USA
 SOURCE: European Journal of Pharmacology, (1 March, 2002) Vol. 438, No. 1-2, pp. 99-105. <http://www.elsevier.com/locate/ejpmolp> harm. print.
 ISSN: 0014-2999.
 DOCUMENT TYPE: Article
 LANGUAGE: English

AB The iboga alkaloid ibogaine and the novel iboga alkaloid congener **18-methoxycoronaridine** are putative anti-addictive agents. Using patch-clamp methodology, the actions of ibogaine and **18-methoxycoronaridine** at various neurotransmitter receptor ion-channel subtypes were determined. Both ibogaine and **18-methoxycoronaridine** were antagonists at alpha3beta4 nicotinic receptors and both agents were more potent at this site than at alpha4beta2 nicotinic receptors or at NMDA or 5-HT3 receptors; **18-methoxycoronaridine** was more selective in this regard than ibogaine. In studies of morphine and methamphetamine self-administration, the effects of low dose combinations of **18-methoxycoronaridine** with mecamylamine or **dextromethorphan** and of mecamylamine with **dextromethorphan** were assessed. Mecamylamine and **dextromethorphan** have also been shown to be antagonists at alpha3beta4 nicotinic receptors. All three drug combinations decreased both morphine and methamphetamine self-administration at doses that were ineffective if administered alone. The data are consistent with the hypothesis that antagonism at alpha3beta4 receptors is a potential mechanism to modulate drug seeking behavior. **18-Methoxycoronaridine** apparently has greater selectivity for this site than other agents and may be the first of a new class of synthetic agents acting via this novel mechanism to produce a broad spectrum of anti-addictive activity.

DUPLICATE 3

ACCESSION NUMBER: 2002:492795 BIOSIS
DOCUMENT NUMBER: PREV200200492795
TITLE: Modulation of nicotine self-administration in rats by
combination therapy with agents blocking alpha3beta4
nicotinic receptors.
AUTHOR(S): Glick, Stanley D. (1); Maisonneuve, Isabelle M.; Kitchen,
Barbara A.
CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience, Albany
Medical College, 47 New Scotland Avenue, MC-136, Albany,
NY, 12208: glicks@mail.amc.edu USA
SOURCE: European Journal of Pharmacology, (19 July, 2002) Vol. 448,
No. 2-3, pp. 185-191. <http://www.elsevier.com/locate/ejpmol>
pharm. print.
ISSN: 0014-2999.
DOCUMENT TYPE: Article
LANGUAGE: English

AB **18-Methoxycoronaridine**, a novel iboga alkaloid
congener that decreases drug self-administration in several animal models,
may be a potential treatment for multiple forms of drug abuse. In previous
work, **18-methoxycoronaridine** was found to be a
somewhat selective antagonist at alpha3beta4 nicotinic receptors; and low
dose combinations of **18-methoxycoronaridine** with other
drugs known to have the same action (e.g., mecamylamine,
dextromethorphan) decreased both morphine and methamphetamine
self-administration in rats at doses that were ineffective if administered
alone. In the present study, similar drug combinations (but including
bupropion as well) were found to decrease nicotine self-administration in
rats. The data further support the hypothesis that diencephalic pathways
having high densities of alpha3beta4 nicotinic receptors modulate
mesocorticolimbic pathways more directly involved in drug reinforcement.
Antagonists of alpha3beta4 nicotinic receptors may represent a totally
novel approach to treating polydrug abuse.

ACCESSION NUMBER: 2002:575739 CAPLUS
 DOCUMENT NUMBER: 137:119689
 TITLE: Methods and compositions using a .alpha.3.beta.4
 nicotinic receptor antagonist combination for treating
 addiction disorders
 INVENTOR(S): Glick, Stanley D.; Maisonneuve, Isabelle M.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 17 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002103109	A1	20020801	US 2002-51770	20020118
WO 2002060425	A1	20020808	WO 2002-US2547	20020129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			US 2001-264742P	P 20010129
			US 2002-51770	A 20020118

AB A method for treating an addiction disorder (e.g. an addiction to or
 dependency on stimulants, nicotine, morphine, heroin, other opiates,
 amphetamines, cocaine, and/or alc.) in a patient is disclosed. The method
 includes administering to the patient a first .alpha.3.beta.4 nicotinic
 receptor antagonist and administering to the patient a second
 .alpha.3.beta.4 nicotinic receptor antagonist. The second .alpha.3.beta.4
 nicotinic receptor antagonist is different than the first .alpha.3.beta.4
 nicotinic receptor antagonist, and the first .alpha.3.beta.4 nicotinic
 receptor antagonist and the second .alpha.3.beta.4 nicotinic receptor
 antagonist are administered simultaneously or non-simultaneously. Compns.
 which include a first .alpha.3.beta.4 nicotinic receptor antagonist and a
 second .alpha.3.beta.4 nicotinic receptor antagonist are also described.
 Examples of suitable .alpha.3.beta.4 nicotinic receptor antagonists for
 use in the methods and compns. include mecamlamine, 18-
methoxycoronaridine, bupropion, **dextromethorphan**,
 dextrorphan, and pharmaceutically acceptable salts and solvates thereof.
 A method of evaluating a compd. for its effectiveness in treating
 addiction disorders is also described.

TITLE: Anti-addictive actions of an iboga alkaloid congener: A novel mechanism for a novel treatment.
 AUTHOR: Maisonneuve I.M.; Glick S.D.
 CORPORATE SOURCE: I.M. Maisonneuve, Ctr. for Neuropharmacology/Neurosci., Albany Medical College, MC-136, 47 New Scotland Avenue, Albany, NY 12208, United States. maisonni@mail.amc.edu
 SOURCE: Pharmacology Biochemistry and Behavior, (2003) 75/3 (607-618).
 Refs: 109
 ISSN: 0091-3057 CODEN: PBBHAU
 COUNTRY: United States
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 008 Neurology and Neurosurgery
 030 Pharmacology
 037 Drug Literature Index
 040 Drug Dependence, Alcohol Abuse and Alcoholism
 LANGUAGE: English
 SUMMARY LANGUAGE: English

AB **18-Methoxycoronaridine** (18-MC), a novel iboga alkaloid congener that decreases drug self-administration in several animal models, may be a potential treatment for multiple forms of drug abuse. In animal models, 18-MC reduced intravenous morphine, cocaine, methamphetamine and nicotine self-administration, oral alcohol and nicotine intake, and attenuated signs of opioid withdrawal, but had no effect on responding for a nondrug reinforcer (water) and produced no apparent toxicity [Brain Res. 719 (1996) 29; NeuroReport 11 (2000) 2013; Pharmacol. Biochem. Behav. 58 (1997) 615; Psychopharmacology (Berl.) 139 (1998) 274; NeuroReport 9 (1998) 1283; Ann. N. Y. Acad. Sci. 914 (2000) 369]. Consistent with a relationship among drug sensitization, mesolimbic dopamine, and drug-seeking behavior, 18-MC also blocked the sensitized dopamine responses to morphine and cocaine in the nucleus accumbens. An extensive series of receptor studies showed that 18-MC was most potent and somewhat selective as an antagonist at $\alpha_3\beta_4$ nicotinic receptors. Low-dose combinations of 18-MC with other drugs known to have this same action (e.g., mecamylamine, **dextromethorphan**, bupropion) decreased morphine, methamphetamine, and nicotine self-administration in rats at doses that were ineffective if administered alone. Together, the data support the hypothesis that diencephalic pathways having high densities of $\alpha_3\beta_4$ nicotinic receptors modulate mesocorticolimbic pathways more directly involved in drug reinforcement. Antagonists of $\alpha_3\beta_4$ nicotinic receptors may represent a totally novel approach to treating multiple addictive disorders, and 18-MC might be the first of a new class of synthetic agents acting via this novel mechanism and having a broad spectrum of activity. .COPYRGHT. 2003 Elsevier Science Inc. All rights reserved.

ACCESSION NUMBER: 2000254472 EMBASE

TITLE: **18-Methoxycoronaridine** differentially
alters the sensitized behavioral and dopaminergic responses
to repeated **cocaine** and morphine administration.
Implications for sensitization in the mediation of drug
addiction.

AUTHOR: Szumlinski K.K.; Maisonneuve I.M.; Glick S.D.

CORPORATE SOURCE: K.K. Szumlinski, Ctr. Neuropharmacology Neuroscience,
Albany Medical College, Albany, New York 12208, United
States. szumlik@mail.amc.edu

SOURCE: Annals of the New York Academy of Sciences, (2000) 909/-
(275-279).

Refs: 15

ISSN: 0077-8923 CODEN: ANYAA

COUNTRY: United States

DOCUMENT TYPE: Journal; Conference Article

FILE SEGMENT: 008 Neurology and Neurosurgery

030 Pharmacology

032 Psychiatry

037 Drug Literature Index

040 Drug Dependence, Alcohol Abuse and Alcoholism

LANGUAGE: English

ACCESSION NUMBER: 2000345663 EMBASE

TITLE: Ibogaine and noribogaine: Comparing parent compound to metabolite.

AUTHOR: Zubaran C.

CORPORATE SOURCE: C. Zubaran, Substance Use Research Center, Columbia University, Unit 120, 1051 Riverside Drive, New York, NY 10032, United States

SOURCE: CNS Drug Reviews, (2000) 6/3 (219-240).

Refs: 112

ISSN: 1080-563X CODEN: CDREFB

COUNTRY: United States

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 030 Pharmacology

037 Drug Literature Index

040 Drug Dependence, Alcohol Abuse and Alcoholism

LANGUAGE: English

SUMMARY LANGUAGE: English

AB Ibogaine is one of the psychoactive alkaloids found in the West African shrub *Tabernanthe iboga*. Since the 1980s, a series of US patents have claimed efficacy for ibogaine in the treatment of drug **addiction**. Since then, more than 60 scientific publications on ibogaine and drug **addiction** have been published. Ibogaine has an acute and a prolonged effect on neurochemistry and behavior. Its metabolite, noribogaine (12-hydroxyibogamine), is produced through metabolic demethylation soon after oral ibogaine administration. Although, they share similar chemical structures, ibogaine and noribogaine display different binding profiles. In rodents both, ibogaine and noribogaine, decreased morphine and **cocaine** intake and modulated dopaminergic transmission. In rats trained to discriminate ibogaine from saline, complete generalization to noribogaine was obtained. Attempts to correlate brain levels of both, the parent compound and the metabolite indicate that noribogaine is primarily responsible for ibogaine discriminative stimulus. Ibogaine-induced neurotoxicity tends to occur at doses much higher than the proposed dose for humans, but caution is important when extrapolating data from ibogaine's effects observed in rodents. Although a definitive clinical validation of purported ibogaine effects is still unavailable, ibogaine has opened new perspectives in the investigation of pharmacotherapies for drug **addiction**.

ACCESSION NUMBER: 2000:416942 BIOSIS

DOCUMENT NUMBER: PREV200000416942

TITLE: Interactions between iboga agents and methamphetamine sensitization: Studies of locomotion and stereotypy in rats.

AUTHOR(S): Szumlinski, Karen K. (1); Balogun, Modinat Y.; Maisonneuve, Isabelle M.; Glick, Stanley D.

CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience (MC-136), Albany Medical College, 47 New Scotland Avenue, Albany, NY, 12208 USA

SOURCE: Psychopharmacology, (August, 2000) Vol. 151, No. 2-3, pp. 234-241. print.

ISSN: 0033-3158.

DOCUMENT TYPE: Article

LANGUAGE: English

SUMMARY LANGUAGE: English

AB Rationale: The phenomenon of sensitization has been theoretically implicated in mediating various aspects of drug **addiction**. Recent dose-response studies demonstrated that pretreatment with the putative anti-addictive agent, ibogaine (IBO), and a synthetic iboga alkaloid congener, **18-methoxycoronaridine** (18-MC), increase the potency of **cocaine** to elicit behavioral sensitization, an effect proposed to contribute, in part, to their ability to attenuate drug self-administration. Objectives: As abuse of the methylated amphetamine derivative, methamphetamine (METH), is a growing public health concern, the present study determined the interactions between IBO and 18-MC and the expression of METH-induced behavioral sensitization. Methods: The effects of pretreatment with 18-MC (40 mg/kg, IP, 19 h earlier) on the expression of METH-induced locomotion (0, 0.25, 0.5, 1 and 2 mg/kg, IP) and the effects of pretreatment with either IBO or 18-MC on the expression of METH-induced stereotypy (2 and 4 mg/kg, IP) were assessed in rats treated chronically with either METH (4 mg/kg daily for 7 days) or saline. Results: Compared to vehicle-pretreated controls, 18-MC produced an overall enhancement in METH-induced locomotion in rats treated chronically, but not acutely, with METH. In addition, both iboga agents increased the stereotypic response to METH. Conclusions: Iboga agents augment both the locomotor and stereotypic effects of METH in a manner consistent with previous reports for **cocaine**. Thus, it appears that iboga agents interact in a similar manner with the neural mechanisms mediating motor hyperactivity induced by the chronic administration of stimulant drugs.

L17 ANSWER 17 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2000:435258 BIOSIS
DOCUMENT NUMBER: PREV200000435258
TITLE: Iboga interactions with psychomotor stimulants: Panacea in
the paradox.
AUTHOR(S): Szumlinski, Karen K. (1); Maisonneuve, Isabelle M.; Glick,
Stanley D.
CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience, Albany
Medical College, 47 New Scotland Avenue, Albany, NY, 12208
USA
SOURCE: Toxicon, (January, 2001) Vol. 39, No. 1, pp. 75-86. print.
ISSN: 0041-0101.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Currently, no effective therapy has been approved for the treatment of
addiction to stimulant drugs (e.g., **cocaine**, amphetamine
and its methylated derivatives). However, preclinical studies indicate
that the naturally-occurring indole alkaloid, ibogaine, and a synthetic
iboga alkaloid congener, **18-methoxycoronaridine**
(18-MC), attenuate stimulant self-administration in laboratory animals.
The in vivo pharmacological interactions between iboga agents and
stimulant drugs are unclear. Ibogaine enhances the increase in accumbal
dopamine produced by the acute administration of stimulant drugs.
Consistent with these data, both ibogaine and 18-MC potentiate the
expression of stimulant-induced motor behaviors in acute and chronic
stimulant-treated animals. To account for the paradox between their
effects on self-administration and motor behavior, we proposed that iboga
agents interfere with stimulant self-administration by increasing
sensitivity to their psychomotor-activating effects. However, this
interpretation is contradicted by very recent observations that 18-MC is
without effect on the dopamine response to acute **cocaine** and
that both ibogaine and 18-MC block the expression of sensitized levels of
dopamine in the nucleus accumbens produced by chronic **cocaine**
administration. Thus, a positive relationship exists between the effects
of iboga pretreatment on stimulant-induced dopamine sensitization and
stimulant self-administration behavior. These data indicate that iboga
agents might attenuate stimulant self-administration by reversing the
neuroadaptations theoretically implicated in drug craving and compulsive
drug-seeking behavior.

ACCESSION NUMBER: 2000288971 EMBASE
TITLE: Iboga interactions with psychomotor stimulants: Panacea in the paradox?.
AUTHOR: Szumlinski K.K.; Maisonneuve I.M.; Glick S.D.
CORPORATE SOURCE: K.K. Szumlinski, Ctr. for Neuropharmacol./Neurosci., MC-136, Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208, United States. szumlik@mail.amc.edu
SOURCE: Toxicon, (1 Jan 2001) 39/1 (75-86).
Refs: 68
ISSN: 0041-0101 CODEN: TOXIA6
PUBLISHER IDENT.: S 0041-0101(00)00158-6
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 030 Pharmacology
032 Psychiatry
037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
052 Toxicology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Currently, no effective therapy has been approved for the treatment of **addiction** to stimulant drugs (e.g., **cocaine**, amphetamine and its methylated derivatives). However, preclinical studies indicate that the naturally- occurring indole alkaloid, ibogaine, and a synthetic iboga alkaloid congener, **18-methoxycoronaridine** (18-MC), attenuate stimulant self-administration in laboratory animals. The in vivo pharmacological interactions between iboga agents and stimulant drugs are unclear. Ibogaine enhances the increase in accumbal dopamine produced by the acute administration of stimulant drugs. Consistent with these data, both ibogaine and 18-MC potentiate the expression of stimulant-induced motor behaviors in acute and chronic stimulant-treated animals. To account for the paradox between their effects on self- administration and motor behavior, we proposed that iboga agents interfere with stimulant self-administration by increasing sensitivity to their psychomotor-activating effects. However, this interpretation is contradicted by very recent observations that 18-MC is without effect on the dopamine response to acute **cocaine** and that both ibogaine and 18-MC block the expression of sensitized levels of dopamine in the nucleus accumbens produced by chronic **cocaine** administration. Thus, a positive relationship exists between the effects of iboga pretreatment on stimulant-induced dopamine sensitization and stimulant self-administration behavior. These data indicate that iboga agents might attenuate stimulant self-administration by reversing the neuroadaptations theoretically implicated in drug craving and compulsive drug-seeking behavior. (C) 2000 Elsevier Science Ltd.

L17 ANSWER 15 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2002:508874 BIOSIS
DOCUMENT NUMBER: PREV200200508874
TITLE: Antagonism of a 3B4 **nicotine** receptors as a
strategy to reduce **opioid**, stimulant, and
nicotine self-administration.
AUTHOR(S): Glick, S. D. (1); Maisonneuve, I. M. (1); Steinmiller, C.
L. (1); Kitchen, B. A. (1); Warner, L. M. (1)
CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience, Albany
Medical College, Albany, NY USA
SOURCE: Drug and Alcohol Dependence, (1 May, 2002) Vol. 66, No.
Supplement 1, pp. S65. <http://www.elsevier.com/locate/druga>
lcdep. print.
Meeting Info.: 64th Annual Scientific Meeting of the
College on Problems of Drug Dependence Quebec City, Quebec,
Canada June 08-13, 2002
ISSN: 0376-8716.
DOCUMENT TYPE: Conference
LANGUAGE: English

L17 ANSWER 14 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2000:373433 BIOSIS
DOCUMENT NUMBER: PREV200000373433
TITLE: **18-Methoxycoronaridine** differentially
alters the sensitized behavioral and dopaminergic responses
to repeated **cocaine** and morphine administration:
Implications for sensitization in the mediation of drug
addiction.
AUTHOR(S): Szumlinski, Karen K. (1); Maisonneuve, Isabelle M.; Glick,
Stanley D.
CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience, MC-136,
Albany Medical College, Albany, NY, 12208 USA
SOURCE: Glick, Stanley D.; Maisonneuve, Isabelle M.. Annals of the
New York Academy of Sciences, (2000) Vol. 909, pp. 275-279.
Annals of the New York Academy of Sciences; New Medications
for drug abuse. print.
Publisher: New York Academy of Sciences 2 East 63rd Street,
New York, NY, 10021, USA.
Meeting Info.: The Archer Conference on Drug Abuse: New
Medications in Memory of Professor Sydney Archer New York,
New York, USA September 29-October 01, 1999
ISSN: 0077-8923. ISBN: 1-57331-275-4 (cloth), 1-57331-276-2
(paper).
DOCUMENT TYPE: Book; Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L17 ANSWER 13 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1998:326312 BIOSIS

DOCUMENT NUMBER: PREV199800326312

TITLE: Effects of **18-methoxycoronaridine** on
acute signs of morphine withdrawal in rats.

AUTHOR(S): Rho, Brian; Glick, Stanley D. (1)

CORPORATE SOURCE: (1) Dep. Pharmacol. Neurosci., Albany Med. Coll., 47 New
Scotland Ave., Albany, NY 12208 USA

SOURCE: Neuroreport, (May 11, 1998) Vol. 9, No. 7, pp. 1283-1285.
ISSN: 0959-4965.

DOCUMENT TYPE: Article

LANGUAGE: English

AB Ibogaine, an alkaloid found in the root bark of the African shrub
Tabernanthe iboga, has been claimed to interrupt **opioid**
dependence in humans; in animals, it has been shown to inhibit morphine
self-administration and to attenuate signs of morphine withdrawal.
However, ibogaine has some neurotoxicity, and because of this, efficacious
and safer congeners of ibogaine have been sought. **18-**
Methoxycoronaridine (18-MC), a novel iboga alkaloid congener, has
been shown, in animals, to mimic the effects of ibogaine on morphine
self-administration without producing any ibogaine-like neurotoxicity. In
the present study, 18-MC was shown to attenuate five of seven signs of
morphine withdrawal in rats. The data suggest that 18-MC will ameliorate
symptoms of **opioid** dependence in humans.

ACCESSION NUMBER: 2000254455 EMBASE
 TITLE: Development of novel medications for drug addiction
 . The legacy of an African shrub.
 AUTHOR: Glick S.D.; Maisonneuve I.M.
 CORPORATE SOURCE: Dr. S.D. Glick, Dept. Pharmacology and Neuroscience,
 MC-136, Albany Medical College, Albany NY 12208, United
 States. glicks@mail.amc.edu
 SOURCE: Annals of the New York Academy of Sciences, (2000) 909/-
 (88-103).
 Refs: 55
 ISSN: 0077-8923 CODEN: ANYAA
 COUNTRY: United States
 DOCUMENT TYPE: Journal; Conference Article
 FILE SEGMENT: 008 Neurology and Neurosurgery
 032 Psychiatry
 037 Drug Literature Index
 038 Adverse Reactions Titles
 040 Drug Dependence, Alcohol Abuse and Alcoholism
 LANGUAGE: English
 SUMMARY LANGUAGE: English

AB Ibogaine, one of several alkaloids found in the root bark of the African shrub *Tabernanthe iboga*, has been claimed to be effective in treating multiple forms of drug abuse. Problems associated with side effects of ibogaine have spawned a search for more effective and safer structural derivatives. **18-Methoxycoronaridine** (18-MC), a novel iboga alkaloid congener, appears to have substantial potential for broad use as an anti-addictive therapy. Like ibogaine (40 mg/kg), 18-MC (40 mg/kg) decreases the intravenous self-administration of morphine and cocaine and the oral self-administration of ethanol and nicotine in rats; unlike ibogaine, 18-MC does not affect responding for a non-drug reinforcer (water). Ibogaine and 18-MC appear to reduce the reinforcing efficacies, rather than the potencies, of drugs of abuse. Both ibogaine and 18-MC decrease extracellular levels of dopamine in the nucleus accumbens while only ibogaine increases serotonin levels in this brain region. Both ibogaine and 18-MC block morphine-induced and nicotine-induced dopamine release in the accumbens; only ibogaine enhances cocaine-induced increases in dopamine levels. Ibogaine produces whole body tremors and, at high doses (at least 100 mg/kg), cerebellar damage; 18-MC does not produce these effects. Ibogaine, but not 18-MC, causes bradycardia at high doses. Ibogaine and its metabolite noribogaine have low μ M affinities for κ and μ opioid receptors, NMDA receptors, 5HT-3 receptors, sigma-2 sites, sodium channels and the serotonin transporter. 18-MC has low μ M affinities at all three opioid receptors and at 5HT-3 receptors but much lower or no affinities for NMDA and sigma-2 receptors, sodium channels, and the 5HT transporter. Both 18-MC and ibogaine are sequestered in fat and, like ibogaine, 18-MC probably has an active metabolite. 18-MC also has (+) and (-) enantiomers, both of which are active. Considered together, all of the data indicate that 18-MC should be safer than ibogaine and at least as efficacious as an anti-addictive medication.

ACCESSION NUMBER: 2003:293693 BIOSIS
DOCUMENT NUMBER: PREV200300293693
TITLE: MODULATION OF MORPHINE SELF - ADMINISTRATION AND MORPHINE -
INDUCED DOPAMINE RELEASE BY INTRA - INTERPEDUNCULAR
ADMINISTRATION OF 18 - MC.
AUTHOR(S): Maisonneuve, I. M. (1); Kitchen, B. A. (1); Warner, L. M.
(1); Glick, S. D. (1)
CORPORATE SOURCE: (1) Center Neuroparmacology/Neurosci, Albany Medical
College, Albany, NY, USA USA
SOURCE: Society for Neuroscience Abstract Viewer and Itinerary
Planner, (2002) Vol. 2002, pp. Abstract No. 310.8.
<http://sfn.scholarone.com.cd-rom>.
Meeting Info.: 32nd Annual Meeting of the Society for
Neuroscience Orlando, Florida, USA November 02-07, 2002
Society for Neuroscience

DOCUMENT TYPE: Conference
LANGUAGE: English

AB **18-Methoxycoronaridine** (18-MC), an iboga alkaloid
congener, has been found, in rats, to decrease the self-administration of
morphine, **cocaine**, methamphetamine, **nicotine** and
alcohol. Consistent with these behavioral effects, 18-MC also
alters **opioid**-and stimulant-induced effects on mesolimbic
dopamine release. Recent studies of 18-MC have indicated that its major
mechanism of action is to block $\alpha 3\beta 4$ nicotinic receptors. However,
only relatively low densities of $\alpha 3\beta 4$ receptors reside in the cell
body (ventral tegmentum) or terminal areas (nucleus accumbens) of the
mesolimbic pathway. Brain $\alpha 3\beta 4$ nicotinic receptors are mainly
located in the medial habenula and the interpeduncular nucleus. While the
interpeduncular nucleus (IPN) receives its major input from the medial
habenula, forming the habenulo-interpeduncular pathway, there are multiple
avenues for interaction between this pathway and the mesolimbic pathway.
To investigate whether 18-MCs action in the IPN might mediate its
interactions with morphine, 18-MC (10-40 μ g) was locally administered
into the IPN immediately before assessing morphine self-administration
(0.1 mg/kg/infusion) and morphine-induced (5 mg/kg, i.p.) dopamine release
in the nucleus accumbens. IPN-administered 18-MC altered both morphine
self-administration and morphine-induced increases in dopamine levels. The
results suggest that a novel mechanism underlies 18-MCs putative
anti-addictive effects and that antagonism of $\alpha 3\beta 4$ nicotinic
receptors may represent an innovative strategy to develop new treatments
for **opioid** as well as possibly other forms of **addiction**

ACCESSION NUMBER: 1996:322746 BIOSIS
DOCUMENT NUMBER: PREV199699045102
TITLE: **18-Methoxycoronaridine**, a non-toxic
iboga alkaloid congener: Effects on morphine and
cocaine self-administration and on mesolimbic
dopamine release in rats.
AUTHOR(S): Glick, S. D. (1); Kuehne, M. E.; Maisonneuve, I. M.;
Bandarage, U. K.; Molinari, H. H.
CORPORATE SOURCE: (1) Dep. Pharmacol. Neurosci., Albany Med. Coll., Albany,
NY 12208 USA
SOURCE: Brain Research, (1996) Vol. 719, No. 1-2, pp. 29-35.
ISSN: 0006-8993.
DOCUMENT TYPE: Article
LANGUAGE: English

AB Ibogaine, a naturally occurring iboga alkaloid, has been claimed to be effective in treating **addiction** to **opioids** and stimulants, and has been reported to inhibit morphine and **cocaine** self-administration in rats. However, ibogaine also has acute nonspecific side effects (e.g. tremors, decreased motivated behavior in general) as well as neurotoxic effects (Purkinje cell loss) manifested in the vermis of the cerebellum. **18-Methoxycoronaridine** (MC) is a novel, synthetic iboga alkaloid congener that mimics ibogaine's effects on drug self-administration without appearing to have ibogaine's other adverse effects. Acutely, in rats, MC decreased morphine and **cocaine** self-administration but did not affect bar-press responding for water. In some rats, treatment with MC (40 mg/kg) induced prolonged decreases in morphine or **cocaine** intake lasting several days or weeks. MC had no apparent tremorigenic effect, and there was no evidence of cerebellar toxicity after a high dose (100 mg/kg) of MC. Similar to the effects of ibogaine and other iboga alkaloids that inhibit drug self-administration, MC (40 mg/kg) decreased extracellular levels of dopamine in the nucleus accumbens. MC therefore appears to be a safer, ibogaine-like agent that might be useful in the treatment of addictive disorders.

ACCESSION NUMBER: 2000:382758 BIOSIS
DOCUMENT NUMBER: PREV200000382758
TITLE: Interactions between 18-
methoxycoronaridine (18-MC) and **cocaine**:
Dissociation of behavioural and neurochemical
sensitization.
AUTHOR(S): Szumlinski, Karen K. (1); McCafferty, Caterina A.;
Maisonneuve, Isabelle M.; Glick, Stanley D.
CORPORATE SOURCE: (1) Center for Neuropharmacology and Neuroscience, Albany
Medical College, 47 New Scotland Avenue, MC-136, Albany,
NY, 12208 USA
SOURCE: Brain Research, (21 July) Vol. 871, No. 2, pp. 245-258.
print.
ISSN: 0006-8993.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The phenomenon of sensitization has been implicated in various aspects of drug **addiction**. As such, the present study determined the effects of a potential anti-addictive agent, 18-**methoxycoronaridine** (18-MC; 40 mg/kg, IP, 19 h earlier), on the expression of sensitization following the repeated administration of **cocaine** (COC; five once daily injections of 15 mg/kg, IP) or saline. The effects of 18-MC on COC metabolism were also assessed. Compared to vehicle controls, 18-MC significantly enhanced the expression of COC-induced locomotion (0, 10, 20 and 40 mg/kg, IP) in chronic COC treated rats only. In both acute and chronic COC rats, 18-MC potentiated the stereotypy induced by higher COC doses (20 and 40 mg/kg, IP). In contrast, 18-MC abolished the sensitized dopamine (DA) response in the nucleus accumbens (NAC) to COC (20 mg/kg), without altering the DA response of acute COC rats. None of the interactions between 18-MC and COC appear to be related to alterations in COC metabolism as no effect of 18-MC pretreatment was observed on extracellular levels of COC or two of its metabolites, benzoylecgonine and norcocaine. From the present findings, it is concluded that the enhancement of COC-induced behaviour produced by 18-MC pretreatment is independent of effects on either COC pharmacokinetics or COC-induced alterations in DA transmission. However, given that 18-MC decreases the self-administration of COC in laboratory animals, it is proposed that the anti-addictive efficacy of 18-MC might be related to an ability to selectively block the expression of sensitized extracellular levels of DA in the NAC in rats with previous COC experience.

ACCESSION NUMBER: 2001:757614 CAPLUS
DOCUMENT NUMBER: 136:111971
TITLE: Mechanisms of action of ibogaine: Relevance to putative therapeutic effects and development of a safer iboga alkaloid congener
AUTHOR(S): Glick, Stanley D.; Maisonneuve, Isabelle M.; Szumlinski, Karen K.
CORPORATE SOURCE: Center for Neuroparmacology and Neuroscience, Albany Medical College, Albany, NY, 12208, USA
SOURCE: Alkaloids (Academic Press) (2001), 56(Ibogaine), 39-53
CODEN: ALKAAR; ISSN: 0099-9598
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review describes the results of studies with ibogaine and with **18-methoxycoronaridine** (18-MC), a novel iboga alkaloid congener. The data presented indicated that there are several ways in which ibogaine and 18-MC could exert antiaddictive effects. Both compds. have affinities for 5-HT₃ receptors, the manipulation of which has been reported to alter amphetamine-induced euphoria in humans and **cocaine**-induced locomotion, **cocaine** discrimination, **alc.** consumption, and morphine withdrawal signs in rodents. Although the pharmacol. of ibogaine and 18-MC is complex, the study of their pharmacol. represents an entirely novel approach to the development of pharmacotherapies for drug **addiction**. (c) 2001 Academic Press.
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:309880 CAPLUS
DOCUMENT NUMBER: 133:68819
TITLE: Pharmacological comparison of the effect of ibogaine
and **18-methoxycoronaridine** on
isolated smooth muscle from the rat and guinea-pig
AUTHOR(S): Munday, M. K.; Blaylock, N. A.; Mason, R.; Glick, S.
D.; Maisonneuve, I. M.; Wilson, V. G.
CORPORATE SOURCE: School of Biomedical Sciences, The Medical School, E.
Floor, Queen's Medical Centre, University of
Nottingham, Nottingham, NG7 2UH, UK
SOURCE: British Journal of Pharmacology (2000), 129(8),
1561-1568
CODEN: BJPCBM; ISSN: 0007-1188
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ibogaine and **18-methoxycoronaridine** are naturally
occurring alkaloids reported to possess antiaddictive properties in
several models of drug dependence. We have examd. their effect at .mu.-
opioid receptors regulating neurogenic contractions of several
smooth muscle preps. and also against spontaneous contractions of the rat
isolated portal vein. Ibogaine (pIC50 5.28) and **18-**
methoxycoronaridine (pIC50 5.05) caused a concn.-dependent
inhibition of cholinergic contractions of the guinea-pig ileum which was
not affected by the **opioid** receptor antagonist naloxone (1
.mu.M). In the rat isolated vas deferens ibogaine and **18-**
methoxycoronaridine caused a concn.-dependent enhancement of
purinergic contractions. Both agents (30 .mu.M) caused a 3-5 fold
rightward displacement of DAMGO-induced inhibition of purinergic
contractions, but similar effects were obsd. for ibogaine against
x2-adrenoceptor-mediated inhibition of neurogenic responses. In the
guinea-pig isolated bladder both ibogaine (10 .mu.M) and **18-**
methoxycoronaridine (10 .mu.M) caused a 2 fold increase in the
purinergic component of neurogenic contractions without significantly
altering cholinergic contractions or responses to exogenous ATP. In
contrast, ibogaine (1-30 .mu.M), but not **18-**
methoxycoronaridine, caused a concn.-dependent enhancement of
spontaneous contractions of the rat isolated portal vein. 5 In summary,
while ibogaine and **18-methoxycoronaridine** modulated
elec.-evoked contractions in the three preps. examd., we have no evidence
for a selective interaction with pre-junctional .mu.-**opioid**
receptors. The pronounced enhancement of purinergic contractions produced
by both agents is a novel finding and worthy of further investigation.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:575739 CAPLUS
DOCUMENT NUMBER: 137:119689
TITLE: Methods and compositions using a .alpha.3.beta.4
nicotinic receptor antagonist combination for treating
addiction disorders
INVENTOR(S): Glick, Stanley D.; Maisonneuve, Isabelle M.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002103109 A1 20020801 US 2002-51770 20020118
WO 2002060425 A1 20020808 WO 2002-US2547 20020129

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-264742P P 20010129
US 2002-51770 A 20020118

AB A method for treating an **addiction** disorder (e.g. an **addiction** to or dependency on stimulants, **nicotine**, morphine, heroin, other opiates, amphetamines, **cocaine**, and/or **alc.**) in a patient is disclosed. The method includes administering to the patient a first .alpha.3.beta.4 nicotinic receptor antagonist and administering to the patient a second .alpha.3.beta.4 nicotinic receptor antagonist. The second .alpha.3.beta.4 nicotinic receptor antagonist is different than the first .alpha.3.beta.4 nicotinic receptor antagonist, and the first .alpha.3.beta.4 nicotinic receptor antagonist and the second .alpha.3.beta.4 nicotinic receptor antagonist are administered simultaneously or non-simultaneously. Compns. which include a first .alpha.3.beta.4 nicotinic receptor antagonist and a second .alpha.3.beta.4 nicotinic receptor antagonist are also described. Examples of suitable .alpha.3.beta.4 nicotinic receptor antagonists for use in the methods and compns. include mecamylamine, **18-methoxycoronaridine**, bupropion, dextromethorphan, dextrorphan, and pharmaceutically acceptable salts and solvates thereof. A method of evaluating a compd. for its effectiveness in treating **addiction** disorders is also described.

L17 ANSWER 3 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2001:48232 USPATFULL
TITLE: Ibogamine congeners
INVENTOR(S): Glick, Stanley D., Delmar, NY, United States
Kuehne, Martin E., Burlington, VT, United States
PATENT ASSIGNEE(S): Albany Medical College, Albany, NY, United States (U.S. corporation)
University of Vermont, Burlington, VT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6211360	B1	20010403
	WO 9705869		19970220
APPLICATION INFO.:	US 1998-11809		19980831 (9)
	WO 1996-US12627		19960802
			19980831 PCT 371 date
			19980831 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-2048P	19950808 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Higel, Floyd D.	
LEGAL REPRESENTATIVE:	Nixon Peabody LLP	
NUMBER OF CLAIMS:	54	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	1535	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to compounds having formula (1), wherein n is from 0 to 8; R^{sup.1} is CH_{sub.2} OH, CH(OH)R^{sup.5}, CH_{sub.2} OR^{sup.5}, CO_{sub.2} R^{sup.5}, C(O)NH_{sub.2}, C(I)NHR^{sup.5}, C(O)NR^{sup.5} R^{sup.6}, C(O)NHNH_{sub.2}, C(O)NHNHR^{sup.5}, C(O)NHNHR^{sup.5} R^{sup.6}, C(O)NR^{sup.5} NH_{sub.2}, C(O)NR^{sup.5} NHR^{sup.6}, C(O)NR^{sup.5} NR^{sup.6} R^{sup.7}, C(O)NHNH(C(O)R^{sup.5}), C(O)NHNHR^{sup.5} (C(O)R^{sup.6}) C(O)NR^{sup.5} NH(C(O)R^{sup.6}), C(O)NR^{sup.5} NR^{sup.6} (C(O)R^{sup.7}), CN, or C(O)R^{sup.5}; R^{sup.2} is H, unsubstituted or substituted alkyl, YH, YR^{sup.8}, YC(O)R^{sup.8}, C(O)YR^{sup.8}, C(O)NH_{sub.2}, C(O)NHR_{sub.8}, C(O)NR^{sup.8} R^{sup.9}, NH_{sub.2}, NHR^{sup.8}, NR^{sup.8} R^{sup.9}, NHC(O)R^{sup.8}, or NR^{sup.8} C(O)R^{sup.9}; R^{sup.3} and R^{sup.4} are the same or different and are selected from the group consisting of H, halogens, unsubstituted or substituted alkyl, OH, OR^{sup.10}, NH_{sub.2}, NHR^{sup.10}, NR^{sup.10} R^{sup.11}, NHC(O)R^{sup.10}, or NR^{sup.10} C(O)R^{sup.11}; R^{sup.5}, R^{sup.6}, R^{sup.7}, R^{sup.8}, R^{sup.9}, R^{sup.10}, and R^{sup.11} are the same or different and are selected from the group consisting of unsubstituted alkyl and substituted alkyl and substituted alkyl; R^{sup.12} is selected from the group consisting of J, unsubstituted alkyl, and substituted alkyl; and Y is O or S; provided that when n is 0, R^{sup.2} is selected from the group consisting of H, substituted alkyl, and unsubstituted alkyl; and pharmaceutically acceptable salts thereof. The compounds are useful in the treatment of subjects addicted to opiates and stimulants and have reduced side effects relative to other ibogamine congeners. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 4 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2000:36138 BIOSIS
DOCUMENT NUMBER: PREV200000036138
TITLE: Attenuation of the reinforcing efficacy of morphine by
18-methoxycoronaridine.
AUTHOR(S): Maisonneuve, Isabelle M. (1); Glick, Stanley D.
CORPORATE SOURCE: (1) Department of Pharmacology and Neuroscience, Albany
Medical College, 47 New Scotland Avenue, Albany, NY, 12208
USA
SOURCE: European Journal of Pharmacology, (Oct. 21, 1999) Vol. 383,
No. 1, pp. 15-21.
ISSN: 0014-2999.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

AB In previous studies, 18-methoxycoronaridine, a novel
iboga alkaloid congener, has been reported to decrease the
self-administration of morphine, cocaine, ethanol and
nicotine, and to attenuate naltrexone-precipitated signs of
morphine withdrawal. In the present study, the nature of the interaction
between 18-methoxycoronaridine and morphine was
further investigated. Using in vivo microdialysis, 18-
methoxycoronaridine pretreatment (40 mg/kg i.p., 19 h beforehand)
was found to markedly inhibit morphine-induced (5 mg/kg, i.p.) dopamine
release in the nucleus accumbens and striatum; 18-
methoxycoronaridine also enhanced morphine-induced increases in
extracellular levels of dopamine's metabolites. These effects, which were
more prominent in the nucleus accumbens than in the striatum, suggest that
18-methoxycoronaridine selectively interferes with
morphine-induced dopamine release, without altering morphine-induced
stimulation of dopamine synthesis. In intravenous morphine
self-administration experiments, the effects of acute 18-
methoxycoronaridine treatment (40 mg/kg, p.o.) were assessed in
rats responding for one of several different unit infusion dosages of
morphine (0.01-0.16 mg/kg/infusion). 18-
Methoxycoronaridine produced a downward shift in the entire
morphine dose-response curve without any displacement to the left or

right. These results suggest that **18-methoxycoronaridine** reduced the reinforcing efficacy of morphine without altering its apparent potency. Together, the microdialysis and self-administration data suggest that **18-methoxycoronaridine** profoundly alters mechanisms crucial to the development and maintenance of **opioid addiction**.

L17 ANSWER 5 OF 22 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2003314923 EMBASE
TITLE: Anti-addictive actions of an iboga alkaloid congener: A novel mechanism for a novel treatment.
AUTHOR: Maisonneuve I.M.; Glick S.D.
CORPORATE SOURCE: I.M. Maisonneuve, Ctr. for Neuropharmacology/Neurosci., Albany Medical College, MC-136, 47 New Scotland Avenue, Albany, NY 12208, United States. maisonni@mail.amc.edu
SOURCE: Pharmacology Biochemistry and Behavior, (2003) 75/3 (607-618).
Refs: 109
ISSN: 0091-3057 CODEN: PBBHAU
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 008 Neurology and Neurosurgery
030 Pharmacology
037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
LANGUAGE: English
SUMMARY LANGUAGE: English

AB **18-Methoxycoronaridine** (18-MC), a novel iboga alkaloid congener that decreases drug self-administration in several animal models, may be a potential treatment for multiple forms of drug abuse. In animal models, 18-MC reduced intravenous morphine, **cocaine**, methamphetamine and **nicotine** self-administration, oral **alcohol** and **nicotine** intake, and attenuated signs of **opioid** withdrawal, but had no effect on responding for a nondrug reinforcer (water) and produced no apparent toxicity [Brain Res. 719 (1996) 29; NeuroReport 11 (2000) 2013; Pharmacol. Biochem. Behav. 58 (1997) 615; Psychopharmacology (Berl.) 139 (1998) 274; NeuroReport 9 (1998) 1283; Ann. N. Y. Acad. Sci. 914 (2000) 369]. Consistent with a relationship among drug sensitization, mesolimbic dopamine, and drug-seeking behavior, 18-MC also blocked the sensitized dopamine responses to morphine and **cocaine** in the nucleus accumbens. An extensive series of receptor studies showed that 18-MC was most potent and somewhat selective as an antagonist at $\alpha_3\beta_4$ nicotinic receptors. Low-dose combinations of 18-MC with other drugs known to have this same action (e.g., mecamylamine, dextromethorphan, bupropion) decreased morphine, methamphetamine, and **nicotine** self-administration in rats at doses that were ineffective if administered alone. Together, the data support the hypothesis that diencephalic pathways having high densities of $\alpha_3\beta_4$ nicotinic receptors modulate mesocorticolimbic pathways more directly involved in drug reinforcement. Antagonists of $\alpha_3\beta_4$ nicotinic receptors may represent a totally novel approach to treating multiple addictive disorders, and 18-MC might be the first of a new class of synthetic agents acting via this novel mechanism and having a broad spectrum of activity.
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FULL ESTIMATED COST	57.54	57.75

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FILE 'USPATFULL' ENTERED AT 11:18:49 ON 26 AUG 2003
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=> s mecamlamine or 60-40-2/rn or mecamlamine or
 2-(methylamino)-2,3,3-trimethylnorbornane or 2-(methylamino)isocamphane
 MISSING OPERATOR '2-(METHYLAMIN'
 The search profile that was entered contains terms or
 nested terms that are not separated by a logical operator.

=> s mecamlamine or 60-40-2/rn or mecamlamine
 'RN' IS NOT A VALID FIELD CODE
 'RN' IS NOT A VALID FIELD CODE
 'RN' IS NOT A VALID FIELD CODE
 'RN' IS NOT A VALID FIELD CODE
 L4 9377 MECAMLAMINE OR 60-40-2/RN OR MECAMLAMINE

=> s bupropion or 34911-55-2/rn
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 L5 4584 BUPROPION OR 34911-55-2/RN

=> s dextrorphan or 125-73-5/rn
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 L6 3771 DEXTRORPHAN OR 125-73-5/RN

=> d his

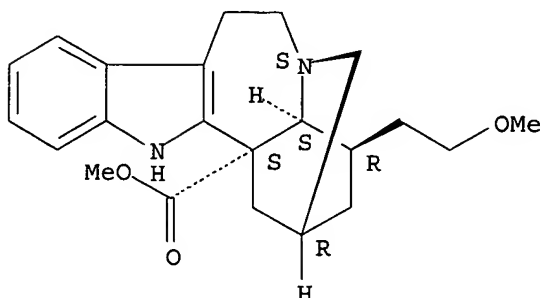
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 L2 8 S BUPROPION
 L3 11 S DEXTRORPHAN

FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, JAPIO, USPATFULL' ENTERED AT
 11:18:49 ON 26 AUG 2003

L1 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 308123-60-6 REGISTRY
 CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN (-)-18-Methoxycoronaridine
 CN 18-Methoxycoronaridine
 FS STEREOSEARCH
 MF C22 H28 N2 O3
 CI COM
 SR CA
 LC STN Files: BIOTECHNO, CA, CAPLUS, DRUGNL, DRUGUPDATES, EMBASE, TOXCENTER

Absolute stereochemistry. Rotation (-).

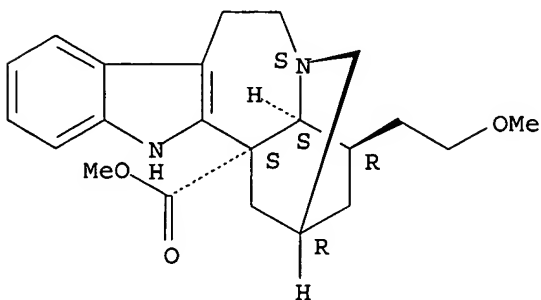


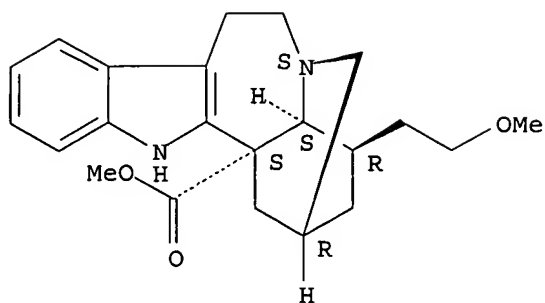
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1937 TO DATE)
 8 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L1 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 266686-77-5 REGISTRY
 CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN (-)-18-Methoxycoronaridine hydrochloride
 FS STEREOSEARCH
 MF C22 H28 N2 O3 . Cl H
 SR CA
 LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, DRUGUPDATES, TOXCENTER, USPATFULL
 CRN (308123-60-6)

Absolute stereochemistry. Rotation (-).



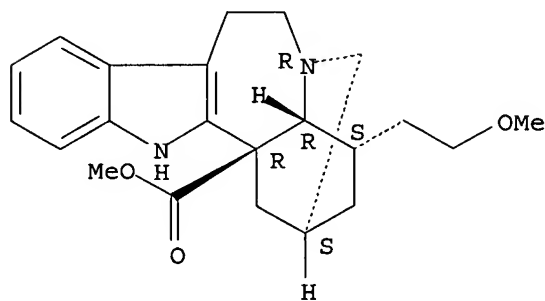


● HCl

3 REFERENCES IN FILE CA (1937 TO DATE)
3 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L1 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 266686-75-3 REGISTRY
CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester,
monohydrochloride, (2.alpha.,4.alpha.,5.beta.,6.alpha.,18.beta.)- (9CI)
(CA INDEX NAME)
OTHER NAMES:
CN (+)-18-Methoxycoronaridine hydrochloride
FS STEREOSEARCH
MF C22 H28 N2 O3 . Cl H
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
CRN (308123-59-3)

Absolute stereochemistry. Rotation (+).



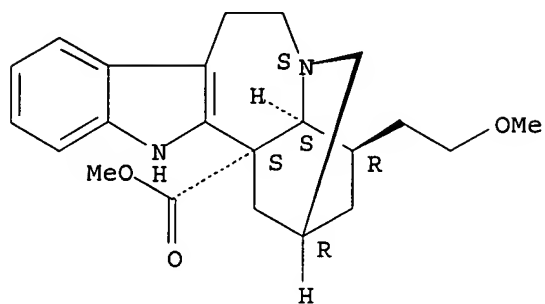
● HCl

3 REFERENCES IN FILE CA (1937 TO DATE)
3 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L1 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 188125-42-0 REGISTRY
CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester, (.-.-)- (9CI)
(CA INDEX NAME)
OTHER NAMES:
CN (.-.-)-18-Methoxycoronaridine
FS STEREOSEARCH
MF C22 H28 N2 O3
SR CA

LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Relative stereochemistry.



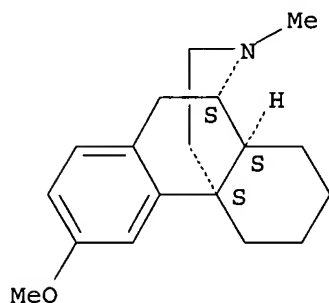
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1937 TO DATE)

5 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 30 OF 31 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 125-71-3 REGISTRY
 CN Morphinan, 3-methoxy-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI)
 (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 9.alpha.,13.alpha.,14.alpha.-Morphinan, 3-methoxy-17-methyl- (8CI)
 OTHER NAMES:
 CN (+)-3-Methoxy-17-methylmorphinan
 CN Ba 2666
 CN d-Methorphan
 CN DEX
 CN **Dextromethorphan**
 CN Nodex
 FS STEREOSEARCH
 DR 18046-32-7, 32062-10-5
 MF C18 H25 N O
 CI COM
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT,
 CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU,
 EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, NIOSHTIC, PHAR,
 PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

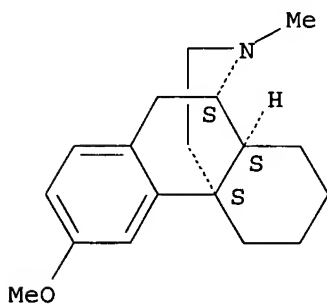
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 ANSWER 31 OF 31 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 125-69-9 REGISTRY
 CN Morphinan, 3-methoxy-17-methyl-, hydrobromide,
 (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 9.alpha.,13.alpha.,14.alpha.-Morphinan, 3-methoxy-17-methyl-, hydrobromide
 (8CI)
 OTHER NAMES:
 CN Antussan
 CN d-3-Methoxy-N-methylmorphinan hydrobromide
 CN d-Methorphan hydrobromide
 CN Delsym
 CN Demorphan
 CN Demorphine
 CN **Dextromethorphan bromide**
 CN **Dextromethorphan hydrobromide**
 CN Dormetan
 CN Dormethan
 CN Medicon
 CN Methorate hydrobromide
 CN Metrorat
 CN Ro 1-5470
 CN Romilar
 CN Tusilan
 CN Tussade
 FS STEREOSEARCH
 DR 18651-95-1
 MF C18 H25 N O . Br H
 CI COM
 LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN,
 CSCHEM, DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB, MRCK*, MSDS-OHS, PHAR,
 PHARMASEARCH, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 CRN (125-71-3)

Absolute stereochemistry.



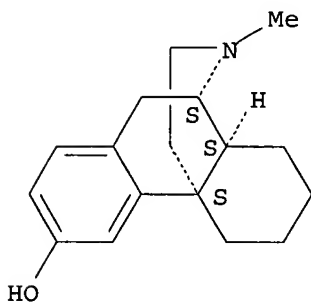
● HBr

359 REFERENCES IN FILE CA (1937 TO DATE)
 7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 360 REFERENCES IN FILE CAPLUS (1937 TO DATE)
 7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=>

L2 ANSWER 29 OF 31 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 125-73-5 REGISTRY
 CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 9.alpha.,13.alpha.,14.alpha.-Morphinan-3-ol, 17-methyl- (8CI)
 OTHER NAMES:
 CN (+)-3-Hydroxy-N-methylmorphinan
 CN (+)-Dromoran
 CN (+)-N-Methylmorphinan-3-ol
 CN d-Levorphanol
 CN dextro-Dromoran
 CN Dextrorphan
 CN **O-Demethyldextromethorphan**
 CN Ro 1-6794
 FS STEREOSEARCH
 MF C17 H23 N O
 CI COM
 LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

605 REFERENCES IN FILE CA (1937 TO DATE)
 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 606 REFERENCES IN FILE CAPLUS (1937 TO DATE)
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

ACCESSION NUMBER: 2000:373737 CAPLUS

DOCUMENT NUMBER: 133:99376

TITLE: **Dextromethorphan** and its metabolite
dextrorphan block .alpha.3.beta.4 neuronal nicotinic
receptors

AUTHOR(S): Hernandez, Susan C.; Bertolino, Maria; Xiao, Yingxian;
Pringle, Kenneth E.; Caruso, Frank S.; Kellar, Kenneth
J.

CORPORATE SOURCE: Department of Pharmacology, Georgetown University
School of Medicine, Washington, DC, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics
(2000), 293(3), 962-967

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental
Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Dextromethorphan** (DM), a structural analog of morphine and
codeine, has been widely used as a cough suppressant for more than 40 yr.
DM is not itself a potent analgesic, but it has been reported to enhance
analgesia produced by morphine and nonsteroidal anti-inflammatory drugs.
Although DM is considered to be nonaddictive, it has been reported to
reduce morphine tolerance in rats and to be useful in helping addicted
subjects to withdraw from heroin. Here we studied the effects of DM on
neuronal nicotinic receptors stably expressed in human embryonic kidney
cells. Studies were carried out to examine the effects of DM on
nicotine-stimulated whole cell currents and nicotine-stimulated 86Rb+
efflux. We found that both DM and its metabolite dextrorphan block
nicotinic receptor function in a noncompetitive but reversible manner,
suggesting that both drugs block the receptor channel. Consistent with
blockade of the receptor channel, neither drug competed for the nicotinic
agonist binding sites labeled by [3H]epibatidine. Although DM is approx.
9-fold less potent than the widely used noncompetitive nicotinic
antagonist **mecamylamine** in blocking nicotinic receptor function,
the block by DM appears to reverse more slowly than that by
mecamylamine. These data indicate that DM is a useful antagonist
for studying nicotinic receptor function and suggest that it might prove
to be a clin. useful neuronal nicotinic receptor antagonist, possibly
helpful as an aid for helping people addicted to nicotine to refrain from
smoking, as well as in other conditions where blockade of neuronal
nicotinic receptors would be helpful.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2002:624651 CAPLUS
 DOCUMENT NUMBER: 137:304675
 TITLE: Displacement and Nonlinear Chromatographic Techniques
 in the Investigation of Interaction of Noncompetitive
 Inhibitors with an Immobilized .alpha.3.beta.4
 Nicotinic Acetylcholine Receptor Liquid
 Chromatographic Stationary Phase
 AUTHOR(S): Jozwiak, Krzysztof; Haginaka, Jun; Moaddel, Ruin;
 Wainer, Irving W.
 CORPORATE SOURCE: Gerontology Research Center, National Institute on
 Aging, National Institutes of Health, Baltimore, MD,
 USA
 SOURCE: Analytical Chemistry (2002), 74(18), 4618-4624
 CODEN: ANCHAM; ISSN: 0003-2700
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A liq. chromatog. column contg. immobilized .alpha.3.beta.4 nicotinic
 acetylcholine receptors (.alpha.3.beta.4-nAChRs) has been used to det. the
 equil. assocn. consts. (K_a), desorption rate consts. (k_d), and adsorption
 rate consts. (k_a) for the noncompetitive inhibitors (NCIs):
mecamylamine, ketamine, bupropion, and **dextromethorphan**.
 Displacement chromatog., with **mecamylamine** as the displacer, was
 used to verify that the four compds. bound to the same site on the
 immobilized .alpha.3.beta.4-nAChRs. Nonlinear chromatog. techniques were
 then utilized to calc. the K_a, k_a, and k_d values assocd. with the
 formation of the noncompetitive inhibitor-.alpha.3.beta.4-nAChR complexes.
 The k_a values detd. in this study ranged from 19.7 to 10.5 .mu.M-1sec-1,
 with a relative order of **mecamylamine** > **dextromethorphan**
 .gtoreq. ketamine > bupropion. The k_d values detd. in this study
 indicated that **dextromethorphan**-induced inhibition should
 produce a longer recovery time than the other three NCIs. This was
 consistent with results from a previous in vitro study. The data from
 this study indicate that the immobilized .alpha.3.beta.4-nAChR column and
 nonlinear chromatog. can be used in the study of NCIs at the
 .alpha.3.beta.4-nAChR.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:373737 CAPLUS

DOCUMENT NUMBER: 133:99376

TITLE: **Dextromethorphan** and its metabolite
dextrorphan block .alpha.3.beta.4 neuronal nicotinic
receptors

AUTHOR(S): Hernandez, Susan C.; Bertolino, Maria; Xiao, Yingxian;
Pringle, Kenneth E.; Caruso, Frank S.; Kellar, Kenneth
J.

CORPORATE SOURCE: Department of Pharmacology, Georgetown University
School of Medicine, Washington, DC, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics
(2000), 293(3), 962-967

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental
Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Dextromethorphan** (DM), a structural analog of morphine and
codeine, has been widely used as a cough suppressant for more than 40 yr.
DM is not itself a potent analgesic, but it has been reported to enhance
analgesia produced by morphine and nonsteroidal anti-inflammatory drugs.
Although DM is considered to be nonaddictive, it has been reported to
reduce morphine tolerance in rats and to be useful in helping addicted
subjects to withdraw from heroin. Here we studied the effects of DM on
neuronal nicotinic receptors stably expressed in human embryonic kidney
cells. Studies were carried out to examine the effects of DM on
nicotine-stimulated whole cell currents and nicotine-stimulated 86Rb+
efflux. We found that both DM and its metabolite dextrorphan block
nicotinic receptor function in a noncompetitive but reversible manner,
suggesting that both drugs block the receptor channel. Consistent with
blockade of the receptor channel, neither drug competed for the nicotinic
agonist binding sites labeled by [3H]epibatidine. Although DM is approx.
9-fold less potent than the widely used noncompetitive nicotinic
antagonist **mecamylamine** in blocking nicotinic receptor function,
the block by DM appears to reverse more slowly than that by
mecamylamine. These data indicate that DM is a useful antagonist
for studying nicotinic receptor function and suggest that it might prove
to be a clin. useful neuronal nicotinic receptor antagonist, possibly
helpful as an aid for helping people addicted to nicotine to refrain from
smoking, as well as in other conditions where blockade of neuronal
nicotinic receptors would be helpful.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1989:502743 CAPLUS
 DOCUMENT NUMBER: 111:102743
 TITLE: Sustained-release pharmaceutical matrixes containing
 polymer blends having reverse phase morphology and
 giving a zero-order rate
 INVENTOR(S): Kashdan, David S.
 PATENT ASSIGNEE(S): Eastman Kodak Co., USA
 SOURCE: U.S., 21 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4795641	A	19890103	US 1987-87566	19870820
CA 1319468	A1	19930629	CA 1988-571672	19880711
EP 303853	A2	19890222	EP 1988-111876	19880723
EP 303853	A3	19901122		
EP 303853	B1	19930922		

R: CH, DE, FR, GB, LI

JP 01090231	A2	19890406	JP 1988-204825	19880819
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PRIORITY APPLN. INFO.: US 1987-87566 19870820

AB Disclosed are polymer blends contg. up to 40% by wt. an insol. cellulose acetate polymer (20-44% acetyl content) and >60% by wt. a sol. cellulose acetate phthalate, cellulose acetate trimellitate, and cellulose acetate succinate polymer. The blends have reverse phase morphol., i.e., wherein the sol. polymer phase comprises regions in the insol. continuous polymer phase. The blends are useful for zero-order controlled delivery of bioactive agents such as pharmaceutical and agricultural chems. Films made of a mixt. of 25% cellulose acetate (39.4% acetyl) and 75% cellulose acetate succinate, were loaded with 5, 10 or 20% **dextromethorphan**. At 5 and 10% loading, zero-order release was shown in simulated intestinal fluid, for 2.5 h, subsequent to an initial 5-min burst. At 20% loading, a greater burst effect was shown. Reverse-phase morphol. of the polymer matrix led to the retention of the structural integrity of the matrix after extn. of the sol. polymer.

L26 ANSWER 13 OF 85 MEDLINE on STN

ACCESSION NUMBER: 2002038738 MEDLINE
DOCUMENT NUMBER: 21618292 PubMed ID: 11768177
TITLE: New medications for nicotine dependence treatment.
AUTHOR: Hurt R D
CORPORATE SOURCE: Nicotine Dependence Center, Mayo Clinic and Mayo
Foundation, Rochester, MN 55905, USA.. rhurt@mayo.edu
SOURCE: NICOTINE & TOBACCO RESEARCH, (1999) 1 Suppl 2 S175-9;
discussion S207-10. Ref: 31
Journal code: 9815751. ISSN: 1462-2203.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 20020124
Last Updated on STN: 20020528
Entered Medline: 20020522

AB For several years, nicotine replacement therapy (nicotine gum, patches, and nasal spray) has been the mainstay for the treatment of nicotine dependence. The nicotine vapor inhaler is a new pharmacological adjunct shown to be effective in placebo-controlled trials. It delivers a vaporized form of nicotine to the oral mucosa. **Bupropion** sustained release (SR) is the first non-nicotine pharmacological treatment approved for smoking cessation and is thought to be effective because of its dopaminergic activity on the pleasure and reward pathways in the mesolimbic system and nucleus accumbens. Though few studies have been reported, there is pharmacological rationale to use combined pharmacotherapies for the treatment of nicotine dependence. While there are a limited number of reported studies with mixed findings using higher than the standard nicotine patch dose, use of higher doses of nicotine patch therapy (i.e., more than one patch at a time) may be appropriate for smokers who previously failed single dose patch therapy or in those whose nicotine withdrawal symptoms were not adequately relieved with standard therapy. The concept of therapeutic drug monitoring can be applied to nicotine replacement therapy. A new product, a sublingual nicotine tablet, has shown efficacy in a double-blind placebo-controlled trial and will likely be approved in the future. The anti-hypertensive, **mecamylamine**, has been found to have efficacy for smoking cessation in a small trial. Nicotine and **mecamylamine** both occupy receptors that would otherwise be acted upon by nicotine from cigarettes, thus, when administered in combination, would be expected to occupy more receptors than either drug alone, thereby attenuating smoking reward and facilitating extinction of the smoking behavior. Pivotal trials of this combination are underway. Remaining questions include: (1) what is the optimal dose and duration of treatment using nicotine replacement therapy? (2) What is the optimal duration of treatment using **bupropion**? (3) What are the best combination treatments and which smokers are best suited for combination treatment? (4) Will other similar pharmacological agents with dopaminergic/noradrenergic activity have efficacy similar to **bupropion**?

ACCESSION NUMBER: 2001:391811 BIOSIS
DOCUMENT NUMBER: PREV200100391811
TITLE: Nicotine addiction treatment.
AUTHOR(S): Cary, Douglas D. (1)
CORPORATE SOURCE: (1) Great Falls, VA USA
ASSIGNEE: Cary Medical Corporation, Bethesda, MD, USA
PATENT INFORMATION: US 6197827 March 06, 2001
SOURCE: Official Gazette of the United States Patent and Trademark
Office Patents, (Mar. 6, 2001) Vol. 1244, No. 1, pp. No
Pagination. e-file.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English

AB The present invention encompasses methods of treating patients for tobacco addiction and nicotine addiction, for palliating the effects of nicotine withdrawal, for providing or facilitating the effects of smoking cessation therapies and as long-term smoking cessation maintenance therapy. The invention also includes related pharmaceutical compositions comprising nicotine receptor antagonists and either an anti-depressant or an anti-anxiety drug. Specific combinations of drugs (**mecamylamine** HCl and **bupropion** HCl) as well as **mecamylamine** in combination with certain drug classes (e.g., anti-anxiety drugs and anti-depressants) comprise the pharmaceutical compositions disclosed. These compositions are also contemplated for use in the treatment of cocaine addiction and the treatment of alcohol dependence.

ACCESSION NUMBER: 2002:519419 BIOSIS
DOCUMENT NUMBER: PREV200200519419
TITLE: Chronic **bupropion** attenuates **mecamylamine**
-precipitated nicotine abstinence syndrome in the rat.
AUTHOR(S): Malin, D. H. (1); Lake, J. R. (1); Smith, T. D. (1);
Meyers-Paal, R. L. (1); Presley, S. E. (1); Montellano, A.
L. (1)
CORPORATE SOURCE: (1) University of Houston-Clear Lake, Houston, TX USA
SOURCE: Drug and Alcohol Dependence, (1 May, 2002) Vol. 66, No.
Supplement 1, pp. S110. <http://www.elsevier.com/locate/drug>
alcdep. print.
Meeting Info.: 64th Annual Scientific Meeting of the
College on Problems of Drug Dependence Quebec City, Quebec,
Canada June 08-13, 2002
ISSN: 0376-8716.
DOCUMENT TYPE: Conference
LANGUAGE: English

CCESSION NUMBER: 2000:312148 CAPLUS
 DOCUMENT NUMBER: 132:329311
 TITLE: Non-nicotine pharmacotherapy for smoking cessation:
 mechanisms and prospects
 AUTHOR(S): Benowitz, Neal L.; Peng, Margaret Wilson
 CORPORATE SOURCE: Clinical Pharmacology Unit of the Medical Service, San
 Francisco General Hospital Medical Center and the
 Departments of Medicine, Psychiatry and
 Biopharmaceutical Sciences, University of California,
 San Francisco, CA, USA
 SOURCE: CNS Drugs (2000), 13(4), 265-285
 CODEN: CNDREF; ISSN: 1172-7047
 PUBLISHER: Adis International Ltd.
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English

AB A review with 115 refs. Nicotine replacement therapy (NRT) has been the
 mainstay of smoking cessation therapy for > 15 yr. However, 70 to 90% of
 smokers fail to quit despite NRT. Non-nicotine medications have been
 investigated as alternative therapies to achieve smoking cessation. NRT
 is believed to work by relieving withdrawal symptoms, and perhaps by
 desensitizing nicotinic cholinergic receptors. Non-nicotine medications
 may work in a variety of ways, including nicotinic cholinergic receptor
 agonism (lobeline),. Nicotine-like effects on neurotransmitter systems
 (antidepressants, clonidine), nicotinic cholinergic receptor antagonism (
mecamylamine) and sensory stimulation/aversion (citric or ascorbic
 acid inhalants or spray, silver acetate). The only non-nicotine drug
 approved for smoking cessation in the US is the antidepressant
 amfebutamone (**bupropion**). Two large clin. trials have
 demonstrated the benefit of the drug, with cessation ratios more than
 twice that of placebo. Amfebutamone is effective in increasing smoking
 cessation regardless of a history of or current depression, and is
 generally well tolerated, although it occasionally produces agitation and
 in excessive doses can cause seizures. Clin. trials suggest the benefit
 of a no. of other non-nicotine medications: the tricyclic antidepressant
 nortriptyline, the antihypertensive clonidine, and silver acetate. A
mecamylamine-nicotine combination may be effective, and sensory
 stimulants, such as citric or ascorbic acid inhalers or sprays, might
 enhance the effects of nicotine or other pharmacotherapies. The
 availability of non-nicotine medications expands the options for smoking
 cessation therapy. A stepped care approach for the selection of
 pharmacotherapies is presented in this review. With this approach,
 initial therapy would involve an attempt to quit using over-the-counter
 nicotine products. If this fails, therapy with other forms of NRT, such
 as nicotine nasal spray, or non-nicotine medication such as amfebutamone
 or other antidepressants, and/or intensive behavioral therapy, should be
 tried. Failure to quit at the second step should lead to combinations of
 nicotine and non-nicotine therapies, as well as clonidine and other newer
 treatments. Future prospects for the pharmacotherapy of smoking cessation
 include the use of nicotine receptor subtype-specific agonists and
 antagonists, targeted to deal with specific reinforcement and/or specific
 withdrawal symptoms. Also of future interest is the development of
 nicotine antibodies that might neutralize the effects of nicotine. It is
 hoped that ultimately medications can be matched with the individual
 characteristics of a smoker, and that smoking cessation could be
 facilitated in most smokers.

REFERENCE COUNT: 115 THERE ARE 115 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

CCESSION NUMBER: 2000:204943 CAPLUS
DOCUMENT NUMBER: 132:218060
TITLE: Advances in non-nicotine pharmacotherapy for smoking
cessation
AUTHOR(S): Covey, Lirio S.; Sullivan, Maria A.; Johnston, J.
Andrew; Glassman, Alexander H.; Robinson, Mark D.;
Adams, David P.
CORPORATE SOURCE: New York State Psychiatric Institute, New York, NY,
USA
SOURCE: Drugs (2000), 59(1), 17-31
CODEN: DRUGAY; ISSN: 0012-6667
PUBLISHER: Adis International Ltd.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review with 80 refs. Progress in understanding the pharmacol. nature of tobacco addiction, along with the modest success rates achieved by the nicotine replacement therapies, has provided the major impetus for the development of non-nicotine drugs as smoking cessation aids. This article reviews evidence from controlled trials of several non-nicotine medications for the treatment of nicotine dependence. Clonidine was the first non-nicotine medication to show efficacy for smoking cessation in multiple studies, but its effect was found to be limited at best. Pos. results across several trials have been consistently demonstrated for amfebutamone (**bupropion**). Encouraging results have also been obsd. for nortriptyline and moclobemide. Studies of combined treatments using non-nicotine medications (amfebutamone, **mecamylamine**, oral dextrose) with nicotine replacement therapy suggest increased efficacy relative to treatments using one or the other treatment strategy alone. Thus, available evidence indicates that non-nicotine drug treatments offer a promising panoply of therapeutic strategies for the addicted smoker.

REFERENCE COUNT: 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1999:244575 CAPLUS
 DOCUMENT NUMBER: 130:263432
 TITLE: Composition for the treatment of nicotine addiction
 containing a nicotine receptor antagonist and an
 anti-depressant or anti-anxiety drug
 INVENTOR(S): Cary, Douglas D.
 PATENT ASSIGNEE(S): Cary Medical Corporation, USA
 SOURCE: PCT Int. Appl., 30 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917803	A1	19990415	WO 1998-US20894	19981002
W: AU, BR, CA, CN, JP, KR, SG, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2305799	AA	19990415	CA 1998-2305799	19981002
AU 9896011	A1	19990427	AU 1998-96011	19981002
AU 750808	B2	20020725		
EP 1019088	A1	20000719	EP 1998-949758	19981002
EP 1019088	B1	20030212		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9812615	A	20000801	BR 1998-12615	19981002
JP 2001518520	T2	20011016	JP 2000-514672	19981002
AT 232384	E	20030215	AT 1998-949758	19981002
US 6197827	B1	20010306	US 1999-423897	19991116
US 2001014678	A1	20010816	US 2001-785496	20010220
PRIORITY APPLN. INFO.:			US 1997-60794P	P 19971003
			WO 1998-US20894	W 19981002
			US 1999-423897	A3 19991116

AB The present invention encompasses methods of treating patients for tobacco addiction and nicotine addiction, for palliating the effects of nicotine withdrawal, for providing or facilitating the effects of smoking cessation therapies and as long-term smoking cessation maintenance therapy. The invention also includes related pharmaceutical compns. comprising nicotine receptor antagonists and either an anti-depressant or an anti-anxiety drug. Specific combinations of drugs (**mecamylamine** HCl and **bupropion** HCl) as well as **mecamylamine** in combination with certain drug classes (e.g., anti-anxiety drugs and anti-depressants) comprise the pharmaceutical compns. disclosed. These compns. are also contemplated for use in the treatment of cocaine addiction and the treatment of alc. dependence.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

L26 ANSWER 1 OF 85 USPATFULL on STN

ACCESSION NUMBER: 2001:134229 USPATFULL
TITLE: Nicotine addiction treatment
INVENTOR(S): Cary, Douglas D., Great Falls, VA, United States
PATENT ASSIGNEE(S): CARY MEDICAL CORPORATION (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001014678	A1	20010816
APPLICATION INFO.:	US 2001-785496	A1	20010220 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-423897, filed on 16 Nov 1999, GRANTED, Pat. No. US 6197827 A 371 of International Ser. No. WO 1998-US20894, filed on 2 Oct 1998, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-60794P	19971003 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORGAN, LEWIS & BOCKIUS, 1800 M STREET NW, WASHINGTON, DC, 20036-5869	
NUMBER OF CLAIMS:	28	
EXEMPLARY CLAIM:	1	
LINE COUNT:	845	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention encompasses methods of treating patients for tobacco addiction and nicotine addiction, for palliating the effects of nicotine withdrawal, for providing or facilitating the effects of smoking cessation therapies and as long-term smoking cessation maintenance therapy. The invention also includes related pharmaceutical compositions comprising nicotine receptor antagonists and either an anti-depressant or an anti-anxiety drug. Specific combinations of drugs (**mecamylamine** HCl and **bupropion** HCl) as well as **mecamylamine** in combination with certain drug classes (e.g., anti-anxiety drugs and anti-depressants) comprise the pharmaceutical compositions disclosed. These compositions are also contemplated for use in the treatment of cocaine addiction and the treatment of alcohol dependence.

L24 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:744954 CAPLUS

DOCUMENT NUMBER: 130:17239

TITLE: Pharmaceutical composition and method combining an antidepressant with an NMDA receptor antagonist, for treating neuropathic pain

INVENTOR(S): Caruso, Frank S.

PATENT ASSIGNEE(S): Algos Pharmaceutical Corp., USA

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9850044	A1	19981112	WO 1998-US9253	19980506
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9874728	A1	19981127	AU 1998-74728	19980506
EP 980247	A1	20000223	EP 1998-922115	19980506
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2001527554	T2	20011225	JP 1998-548451	19980506
US 2002035105	A1	20020321	US 2001-966975	20010928
PRIORITY APPLN. INFO.:			US 1997-45900P	P 19970507
			WO 1998-US9253	W 19980506
			US 1999-434907	A3 19991105

AB The neuropathic pain alleviating effectiveness of an antidepressant is significantly potentiated by administering the antidepressant prior to, with or following the administration of a nontoxic NMDA receptor antagonist. A pharmaceutical capsule contained chlorimipramine hydrochloride 25, and dextromethorphan hydrobromide 30 mg.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2002:613714 CAPLUS
TITLE: Synthesis and characterization of immobilized neuronal
nicotinic receptors and the online screening of
nicotinic binding affinities via LC-MS
AUTHOR(S): Wainer, Irving W.; Moaddel, Ruin; Jozwiak, Krzysztof;
Beigi, Farideh
CORPORATE SOURCE: LCI, Gerontology Research Centre, National Institute
on Aging, Baltimore, MD, 21224, USA
SOURCE: Abstracts of Papers, 224th ACS National Meeting,
Boston, MA, United States, August 18-22, 2002 (2002),
ANYL-199. American Chemical Society: Washington, D.
C.
CODEN: 69CZPZ
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English

AB A liq. chromatog. column contg. immobilized a3b4 nicotinic acetylcholine
receptors (a3b4-nAChRs) has been used to identify agonists, antagonists
and noncompetitive inhibitors (NCIs) of a3b4-nAChR. This column was then
used to characterize 4 known NCIs {mecamylamine, ketamine,
bupropion and **dextromethorphan**} and to det. their equil.
assocn. consts. (Ka), desorption rate consts. (kd) and adsorption rate
consts. (ka). Displacement chromatog., with mecamylamine as the
displacer, was used to verify that these four compds. bound to the same
site on the immobilized a3b4-nAChRs. Non-linear chromatog. techniques
were then utilized to calc. the Ka, ka and kd values assocd. with the
formation of the noncompetitive inhibitor- a3b4-nAChR complexes. A casset
of 30 compds. was then studied and analyzed using 2-D and 3-D QSAR.
Columns contg. other nAChR subtypes have also been created and
characterized. Online parallel screening techniques will be demonstrated
for nAChR subtypes and for other immobilized receptors, including
G-protein coupled receptors.

ACCESSION NUMBER: 1998:744954 CAPLUS
 DOCUMENT NUMBER: 130:17239
 TITLE: Pharmaceutical composition and method combining an
 antidepressant with an NMDA receptor antagonist, for
 treating neuropathic pain
 INVENTOR(S): Caruso, Frank S.
 PATENT ASSIGNEE(S): Algos Pharmaceutical Corp., USA
 SOURCE: PCT Int. Appl., 22 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9850044	A1	19981112	WO 1998-US9253	19980506
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9874728	A1	19981127	AU 1998-74728	19980506
EP 980247	A1	20000223	EP 1998-922115	19980506
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2001527554	T2	20011225	JP 1998-548451	19980506
US 2002035105	A1	20020321	US 2001-966975	20010928
PRIORITY APPLN. INFO.:			US 1997-45900P	P 19970507
			WO 1998-US9253	W 19980506
			US 1999-434907	A3 19991105

AB The neuropathic pain alleviating effectiveness of an antidepressant is significantly potentiated by administering the antidepressant prior to, with or following the administration of a nontoxic NMDA receptor antagonist. A pharmaceutical capsule contained chlorimipramine hydrochloride 25, and **dextromethorphan** hydrobromide 30 mg.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORM

NEWS 38 AUG 18 Simultaneous left and right truncation added to ANABSTR

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
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NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

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DICTIONARY FILE UPDATES: 24 AUG 2003 HIGHEST RN 572107-42-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s mecamlamine
L1 7 MECAMYLAMINE

=> s bupropion
L2 8 BUPROPION

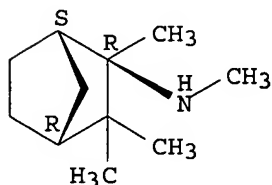
=> s dextrorphan
L3 11 DEXTRORPHAN

=> d l1 1-7

L1 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN

RN 107596-31-6 REGISTRY
 CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride,
 (1S,2R,4R)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride,
 (1S-exo)-
 OTHER NAMES:
 CN (-)-Mecamylamine hydrochloride
 CN NIH 11009
 CN R-(-)-Mecamylamine hydrochloride
 FS STEREOSEARCH
 MF C11 H21 N . Cl H
 SR CA
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, TOXCENTER,
 USPATFULL
 (*File contains numerically searchable property data)
 CRN (107538-06-7)

Absolute stereochemistry.

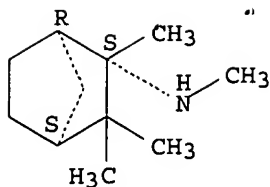


● HCl

9 REFERENCES IN FILE CA (1937 TO DATE)
 9 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L1 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 107596-30-5 REGISTRY
 CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride,
 (1R,2S,4S)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride,
 (1R-exo)-
 OTHER NAMES:
 CN (+)-Mecamylamine hydrochloride
 CN NIH 11008
 CN S-(+)-Mecamylamine hydrochloride
 FS STEREOSEARCH
 MF C11 H21 N . Cl H
 SR CA
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, TOXCENTER,
 USPATFULL
 (*File contains numerically searchable property data)
 CRN (107538-05-6)

Absolute stereochemistry.



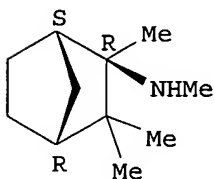
● HCl

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1937 TO DATE)
9 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L1 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN
RN 107538-06-7 REGISTRY
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, (1S,2R,4R) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, (1S-endo) -
OTHER NAMES:
CN (-)-**Mecamylamine**
FS STEREOSEARCH
MF C11 H21 N
CI COM
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



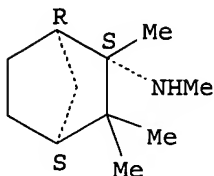
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1937 TO DATE)
8 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L1 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN
RN 107538-05-6 REGISTRY
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, (1R,2S,4S) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, (1R-endo) -
OTHER NAMES:
CN (+)-**Mecamylamine**
CN **Mecamylamine**, (+) -
FS STEREOSEARCH
MF C11 H21 N
CI COM
SR CA

LC STN Files:,, BEILSTEIN*, CA, CAPLUS, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



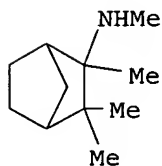
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1937 TO DATE)
10 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L1 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN
RN 39291-10-6 REGISTRY
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)- (3-endo)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, sulfate (2:1) (salt), mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine hydrochloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester endo-(+.-)-, sulfate (2:1) (salt), mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine hydrochloride
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester endo-, sulfate (2:1) (salt), mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine hydrochloride
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride, mixt. contg. (9CI)
OTHER NAMES:
CN Mecamylamine hydrochloride-atropine sulfate mixt.
FS STEREOSEARCH
DR 39336-90-8
MF C17 H23 N O3 . C11 H21 N . Cl H . 1/2 H2 O4 S
CI MXS
LC STN Files: CA, CAPLUS

CM 1

CRN 826-39-1 (60-40-2)
CMF C11 H21 N . Cl H



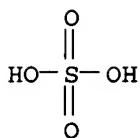
HCl

CM 2

CRN 55-48-1
CMF C17 H23 N O3 . 1/2 H2 O4 S

CM 3

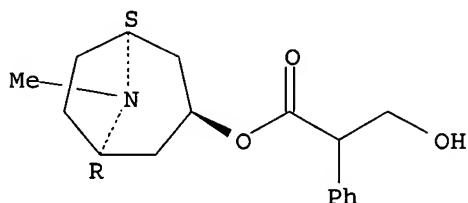
CRN 7664-93-9
CMF H2 O4 S



CM 4

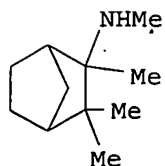
CRN 51-55-8
CMF C17 H23 N O3

Relative stereochemistry.



1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

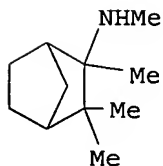
L1 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN
RN 826-39-1 REGISTRY
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride (8CI)
OTHER NAMES:
CN CPDD 0059
CN Inversine
CN Mecamylamine chloride
CN Mecamylamine hydrochloride
CN Mevasin
CN Mevasine
CN N,2,3,3-Tetramethyl-2-norbornanamine hydrochloride
MF C11 H21 N . Cl H
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS,
CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSChem, DIOGENES, EMBASE,
HODOC*, IPA, MRCK*, PROMT, RTECS*, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (60-40-2)



HCl

167 REFERENCES IN FILE CA (1937 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 167 REFERENCES IN FILE CAPLUS (1937 TO DATE)
 10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 60-40-2 REGISTRY
 CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 2-Norbornanamine, N,2,3,3-tetramethyl- (8CI)
 OTHER NAMES:
 CN 2-(Methylamino)-2,3,3-trimethylnorbornane
 CN 2-(Methylamino)isocamphane
 CN 3-(Methylamino)-2,2,3-trimethylbicyclo[2.2.1]heptane
 CN 3-(Methylamino)isocamphane
 CN Mecamine
 CN **Mecamylamine**
 CN N,2,3,3-Tetramethyl-2-norbornanamine
 CN N,2,3,3-Tetramethyl-2-norcamphanamine
 CN N-Methyl-2-isocamphanamine
 CN Revertina
 FS 3D CONCORD
 MF C11 H21 N
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PHAR, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

641 REFERENCES IN FILE CA (1937 TO DATE)
 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 642 REFERENCES IN FILE CAPLUS (1937 TO DATE)
 22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d his.

(FILE 'HOME' ENTERED AT 11:16:42 ON 26 AUG 2003)

FILE 'REGISTRY' ENTERED AT 11:17:09 ON 26 AUG 2003

L1 7 S MECAMYLAMINE
L2 8 S BUPROPION
L3 11 S DEXTROPHAN

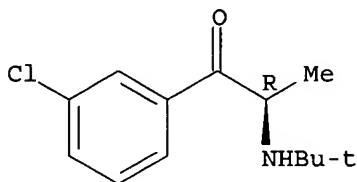
=> d l2 1-8

L2 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 437723-96-1 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, (2R)- (9CI)
(CA INDEX NAME)

OTHER NAMES:

CN (R)-Bupropion
FS STEREOSEARCH
MF C13 H18 Cl N O
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

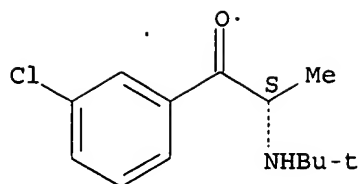
1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 324548-45-0 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, hydrochloride, (2S)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (S)-Bupropion hydrochloride
FS STEREOSEARCH
MF C13 H18 Cl N O . Cl H
SR CA
LC STN Files: CA, CAPLUS, CASREACT
CRN (324548-43-8)

Absolute stereochemistry.

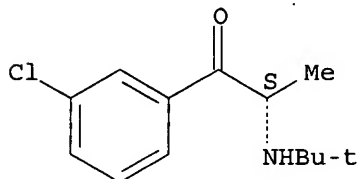


● HCl

1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 324548-43-8 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, (2S)- (9CI)
(CA INDEX NAME)
OTHER NAMES:
CN (S)-Bupropion
FS STEREOSEARCH
MF C13 H18 Cl N O
CI COM
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.

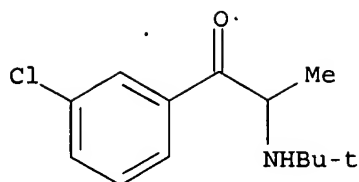


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1937 TO DATE)
2 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 234447-17-7 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, hydrochloride, (-)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (-)-Bupropion hydrochloride
FS STEREOSEARCH
MF C13 H18 Cl N O . Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (144445-76-1)

Rotation (-).

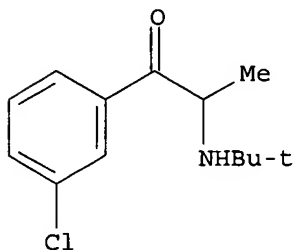


● HCl

2 REFERENCES IN FILE CA (1937 TO DATE)
2 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 144445-76-1 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, (-)-(9CI)
(CA INDEX NAME)
OTHER NAMES:
CN (-)-**Bupropion**
FS STEREOSEARCH
MF C13 H18 Cl N O
CI COM
SR CA
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, DRUGPAT, DRUGUPDATES,
TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Rotation (-).

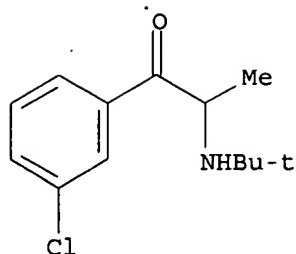


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1937 TO DATE)
10 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 144445-75-0 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, (+)-(9CI)
(CA INDEX NAME)
OTHER NAMES:
CN (+)-**Bupropion**
FS STEREOSEARCH
MF C13 H18 Cl N O
CI COM
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, DRUGPAT, DRUGUPDATES, TOXCENTER,
USPAT2, USPATFULL
(*File contains numerically searchable property data)

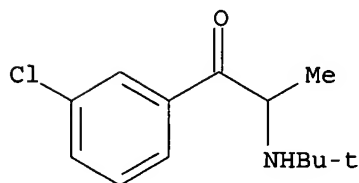
Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1937 TO DATE)
11 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 34911-55-2 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, (.+-.)-
OTHER NAMES:
CN (.+-.)-**Bupropion**
CN .alpha.-(tert-Butylamino)-m-chloropropiophenone
CN Amfebutamon
CN Amfebutamone
CN **Bupropion**
CN **Bupropion SR**
DR 34841-39-9
MF C13 H18 Cl N O
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CBNB, CHEMCATS, CIN, CSCHM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

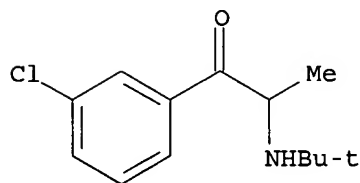


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

539 REFERENCES IN FILE CA (1937 TO DATE)
10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
542 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L2 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
RN 31677-93-7 REGISTRY
CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-,

hydrochloride (9CI) (CA INDEX NAME)
 OTHER CA-INDEX NAMES:
 CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, hydrochloride, (.+-.)-
 CN Propiophenone, 2-(tert-butylamino)-3'-chloro-, hydrochloride, (.+-.)- (8CI)
 OTHER NAMES:
 CN .alpha.-(tert-Butylamino)-m-chloropropiophenone hydrochloride
 CN **Bupropion hydrochloride**
 CN DL-.alpha.-t-Butylamino-3-chloropropiophenone hydrochloride
 CN m-Chloro-.alpha.-tert-butylaminopropiophenone hydrochloride
 CN NSC 315851
 CN Wellbatrin
 CN Wellbutrin
 CN Zyban
 CN Zyban (pharmaceutical)
 DR 34841-36-6
 MF C13 H18 Cl N O . Cl H
 CI COM
 LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSChem, DIOGENES, DRUGPAT, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, MSDS-OHS, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 CRN (34911-55-2)



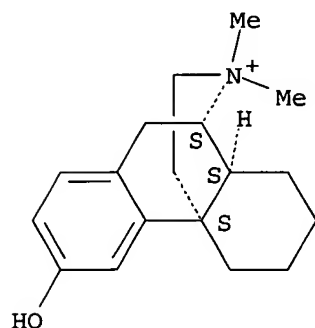
● HCl

109 REFERENCES IN FILE CA (1937 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 110 REFERENCES IN FILE CAPLUS (1937 TO DATE)

=> d 13 1-11

L3 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 136877-79-7 REGISTRY
 CN Morphinanium, 3-hydroxy-17,17-dimethyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN **Dextrorphan metho deriv.**
 CN **N-Methyldextrorphan**
 FS STEREOSEARCH
 MF C18 H26 N O
 CI COM
 SR CA
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS
 (*File contains numerically searchable property data)

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1937 TO DATE)
2 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 130940-64-6 REGISTRY
CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)-,
2-hydroxy-1,2,3-propanetricarboxylate (salt) (9CI) (CA INDEX NAME)

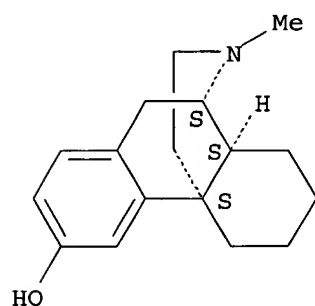
OTHER NAMES:

CN **Dextrorphan citrate**
FS STEREOSEARCH
MF C17 H23 N O . x C6 H8 O7
SR CA
LC STN Files: CA, CAPLUS, IPA, PHAR, USPATFULL

CM 1

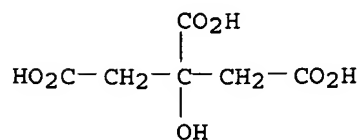
CRN 125-73-5
CMF C17 H23 N O

Absolute stereochemistry.



CM 2

CRN 77-92-9
CMF C6 H8 O7



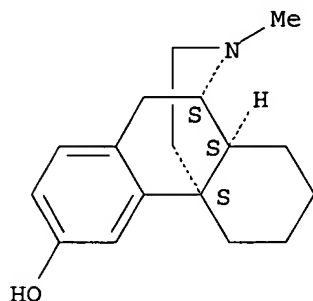
1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 85199-05-9 REGISTRY
CN Morphinan-3-ol, 17-methyl-, labeled with tritium,
(9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Tritiated dextrorphan**
CN **[3H]-Dextrorphan**
FS STEREOSEARCH
MF C17 H23 N O
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER
IL XH-3

Absolute stereochemistry.



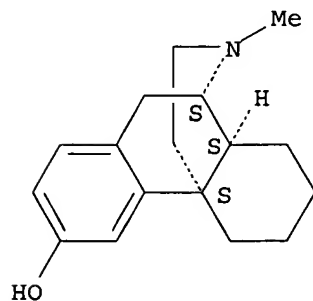
1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 69376-27-8 REGISTRY
CN Morphinan-3-ol, 17-methyl-, hydrochloride, (9.alpha.,13.alpha.,14.alpha.)-
(9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Dextrorphan hydrochloride**
CN Ro 01-6794/706
FS STEREOSEARCH
MF C17 H23 N O . Cl H
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
CRN (125-73-5)

Absolute stereochemistry.



HCl

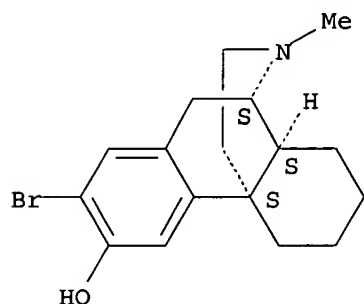
4 REFERENCES IN FILE CA (1937 TO DATE)
4 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 69326-85-8 REGISTRY
CN Morphinan-3-ol, 2-bromo-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI)
(CA INDEX NAME)

OTHER NAMES:

CN **2-Bromodextrorphan**
FS STEREOSEARCH
MF C17 H22 Br N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

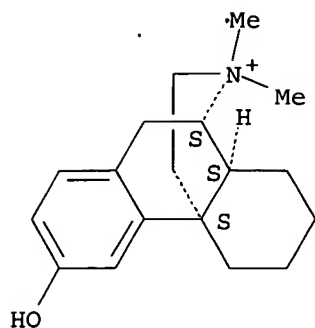
1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 25144-88-1 REGISTRY
CN Morphinanium, 3-hydroxy-17,17-dimethyl-, iodide,
(9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9.alpha.,13.alpha.,14.alpha.-Morphinanium, 3-hydroxy-17,17-dimethyl-,
iodide (8CI)

OTHER NAMES:

CN **N-Methyldextrorphan iodide**
FS STEREOSEARCH
MF C18 H26 N O . I
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)
CRN (136877-79-7)

Absolute stereochemistry.

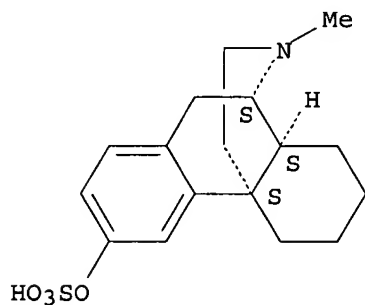


● I⁻

2 REFERENCES IN FILE CA (1937 TO DATE)
2 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 19368-71-9 REGISTRY
CN Morphinan-3-ol, 17-methyl-, hydrogen sulfate (ester),
(9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9.alpha.,13.alpha.,14.alpha.-Morphinan-3-ol, 17-methyl-, hydrogen sulfate
(ester) (8CI)
OTHER NAMES:
CN **Dextropropoxyphene sulfate**
FS STEREOSEARCH
MF C17 H23 N O4 S
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



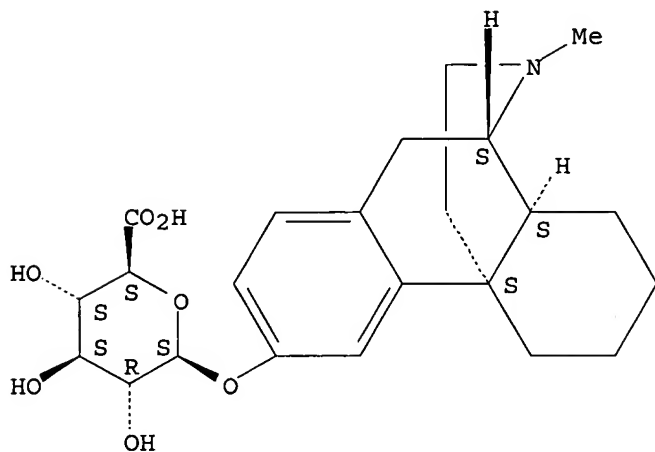
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1937 TO DATE)
3 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 19153-87-8 REGISTRY
CN .beta.-D-Glucopyranosiduronic acid, (9.alpha.,13.alpha.,14.alpha.)-17-
methylmorphinan-3-yl (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glucopyranosiduronic acid, 17-methyl-9.alpha.,13.alpha.,14.alpha.-
morphinan-3-yl, .beta.-D- (8CI)
CN Morphinan, .beta.-D-glucopyranosiduronic acid deriv.
OTHER NAMES:

CN Dextrorphan 3-glucuronide
 CN Dextrorphan glucuronide
 FS STEREOSEARCH
 MF C23 H31 N O7
 LC STN Files: BIOSIS, CA, CAPLUS, CASREACT

Absolute stereochemistry.

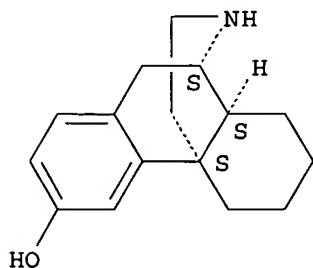


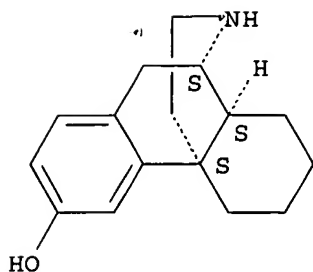
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1937 TO DATE)
 5 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 15676-23-0 REGISTRY
 CN Morphinan-3-ol, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 9.alpha.,13.alpha.,14.alpha.-Morphinan-3-ol (8CI)
 OTHER NAMES:
 CN (+)-3-Hydroxymorphinan
 CN (+)-Morphinan-3-ol
 CN 3-Hydroxy-9.alpha.,13.alpha.,14.alpha.-morphinan
 CN N,O-Didemethyldextromethorphan
 CN **Nordextrorphan**
 FS STEREOSEARCH
 MF C16 H21 N O
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,
 CHEMINFORMRX, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)

Absolute stereochemistry.





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

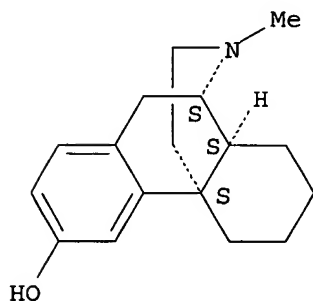
21 REFERENCES IN FILE CA (1937 TO DATE)
21 REFERENCES IN FILE CAPLUS (1937 TO DATE)

L3 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
RN 143-98-6 REGISTRY
CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)-,
(2R,3R)-2,3-dihydroxybutanedioate (1:1) (salt) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)-,
[R-(R*,R*)]-2,3-dihydroxybutanedioate (1:1) (salt)
OTHER NAMES:
CN d-3-Hydroxy-N-methylmorphinan tartrate
CN **Dextrophan bitartrate**
CN **Dextrophan tartrate**
CN NIH 4591
FS STEREOSEARCH
DR 27686-11-9
MF C17 H23 N O . C4 H6 O6
LC STN Files: BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, EMBASE,
RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

CM 1

CRN 125-73-5
CMF C17 H23 N O

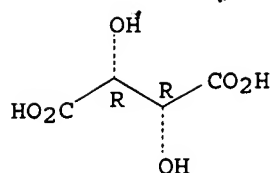
Absolute stereochemistry.



CM 2

CRN 87-69-4
CMF C4 H6 O6

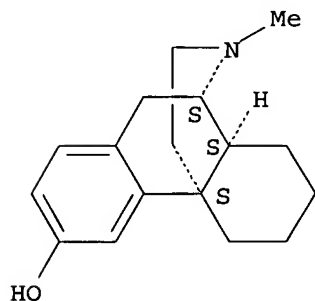
Absolute stereochemistry.



127 REFERENCES IN FILE CA (1937 TO DATE)
 127 REFERENCES IN FILE CAPLUS (1937 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 125-73-5 REGISTRY
 CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 9.alpha.,13.alpha.,14.alpha.-Morphinan-3-ol, 17-methyl- (8CI)
 OTHER NAMES:
 CN (+)-3-Hydroxy-N-methylmorphinan
 CN (+)-Dromoran
 CN (+)-N-Methylmorphinan-3-ol
 CN d-Levorphanol
 CN dextro-Dromoran
 CN **Dextrophan**
 CN O-Demethyldextromethorphan
 CN Ro 1-6794
 FS STEREOSEARCH
 MF C17 H23 N O
 CI COM
 LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

605 REFERENCES IN FILE CA (1937 TO DATE)
 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 606 REFERENCES IN FILE CAPLUS (1937 TO DATE)
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:41303 CAPLUS

DOCUMENT NUMBER: 137:878

TITLE: [3H]Epibatidine binding to bovine adrenal medulla:
evidence for **.alpha.3.beta**
.4* nicotinic receptors

AUTHOR(S): Free, R. Benjamin; Bryant, Darrell L.; McKay, Susan
B.; Kaser, Daniel J.; McKay, Dennis B.

CORPORATE SOURCE: Division of Pharmacology, The Ohio State University
College of Pharmacy, Columbus, OH, 43210, USA

SOURCE: Neuroscience Letters (2002), 318(2), 98-102

CODEN: NELED5; ISSN: 0304-3940

PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In these studies, [3H]epibatidine is used as the radioligand to
characterize nicotinic acetylcholine receptors (nAChRs) from bovine
adrenal medulla. Specific binding reaches equil. within 30 min, and is
saturable with a Kd value of 0.5 nM. The affinities of several
cholinergic agents were detd., including nicotine (Ki, 0.2 .mu.M),
cytisine (Ki, 0.4 .mu.M), carbachol (Ki, 4.7 .mu.M), **dihydro-
beta.-erythroidine** (Ki, 33.6 .mu.M), d-
tubocurarine (Ki, 0.4 .mu.M), 1,1-dimethyl-4-phenyl-piperazinium
(Ki, 0.8 .mu.M), decamethonium (Ki, 234 .mu.M) and methyllycaconitine (Ki,
1.3 .mu.M). These values are similar to reported values for recombinant
.alpha.3.beta.4 nAChRs in transfected cell lines. These studies
demonstrate [3H]epibatidine binding to an easily obtainable adrenal
membrane prepn. and support the characterization of adrenal nAChRs as
.alpha.3.beta.4* nAChRs.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1998363671 EMBASE

TITLE: .alpha.-Conotoxin AuIB selectively blocks .alpha.
3.beta.4 nicotinic
acetylcholine receptors and nicotine-evoked norepinephrine
release.

AUTHOR: Luo S.; Kulak J.M.; Cartier G.E.; Jacobsen R.B.; Yoshikami
D.; Olivera B.M.; McIntosh J.M.

CORPORATE SOURCE: J.M. McIntosh, 201 South Biology Building, University of
Utah, Salt Lake City, UT 84112-0840, United States

SOURCE: Journal of Neuroscience, (1 Nov 1998) 18/21 (8571-8579).

Refs: 32

ISSN: 0270-6474 CODEN: JNRSDS

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 002 Physiology

LANGUAGE: English

SUMMARY LANGUAGE: English

AB Neuronal nicotinic acetylcholine receptors (nAChRs) with putative .alpha.3.beta.4-subunits have been implicated in the mediation of signaling in various systems, including ganglionic transmission peripherally and nicotine-evoked neurotransmitter release centrally. However, progress in the characterization of these receptors has been hampered by a lack of .alpha.3.beta.4-selective ligands. In this report, we describe the purification and characterization of an .alpha.3.beta.4 nAChR antagonist, .alpha.-conotoxin AuIB, from the venom of the 'court cone,' *Conus aulicus*. We also describe the total chemical synthesis of this and two related peptides that were also isolated from the venom. .alpha.-Conotoxin AuIB blocks .alpha.3.beta.4 nAChRs expressed in *Xenopus* oocytes with an IC₅₀ of 0.75 .mu.M, a k(on) of 1.4 x 10⁶ min⁻¹ M⁻¹, a k(off), of 0.48 min⁻¹, and a K(d) of 0.5 .mu.M. Furthermore, .alpha.-conotoxin AuIB blocks the .alpha.3.beta.4 receptor with >100-fold higher potency than other receptor subunit combinations, including .alpha.2.beta.2, .alpha.2.beta.4, .alpha.3.beta.2, .alpha.4.beta.2, .alpha.4.beta.4, and .alpha.1.beta.1.gamma..delta.. Thus, AuIB is a novel, selective probe for .alpha.3.beta.4 nAChRs. AuIB (1-5 .mu.M) blocks 20-35% of the nicotine-stimulated norepinephrine release from rat hippocampal synaptosomes, whereas nicotine-evoked dopamine release from striatal synaptosomes is not affected. Conversely, the .alpha.3.beta.2-specific .alpha.-conotoxin MII (100 nM) blocks 33% of striatal dopamine release but not hippocampal norepinephrine release. This suggests that in the respective systems, .alpha.3.beta.4- containing nAChRs mediate norepinephrine release, whereas .alpha.3.beta.2-containing receptors mediate dopamine release.